

LEGEND AND FOLLOWING NOTES
APPLY TO DWG. WP01 THROUGH WP08

WATER LEGEND	
—	EXIST. WATER LINE
—	EXIST. FIRE HYDRANT
—	EXIST. WATER METER
—	NEW WATER LINE
—	NEW CONTROL DENSITY FILL (CDF)
—	NEW FIRE HYDRANT ASSEMBLY
—	NEW WATER VALVE
—	NEW BLOW-OFF
—	NEW PLUG
—	NEW END CAP
—	NEW THRUST BLOCK
—	NEW TRANSITION SLEEVE
—	RELOCATED WATER METER
—	NEW PLANE AND OVERLAY

ABANDONMENT NOTE:

WHENEVER A PIPE IS CUT AND NOT RECONNECTED, THE CUT ENDS SHALL BE CAPPED OR PLUGGED, AS DIRECTED BY INSPECTOR. ALL VALVE BOX TOPS ASSOCIATED WITH THE ABANDONED LINE SHALL BE REMOVED AND FILLED WITH CDF. THIS IS INCIDENTAL TO THE CONTRACTED WORK AND SHALL BE A PART OF OVERALL CONTRACT PRICE.

A.C. PIPE NOTE:

CONTRACTOR SHALL SUPPLY WORKER WHO IS CERTIFIED TO WORK ON A.C. PIPE WHEN ANY A.C. PIPE IS ENCOUNTERED DURING THE PROJECT.

CROSSING NOTE:

MAINTAIN MINIMUM CLEARANCES AT ALL PROPOSED CROSSINGS AS PER GENERAL NOTES, DWG. WP09.

SERVICE METER NOTE:

ACTUAL LOCATION OF NEW WATER METERS SHALL BE DETERMINED BY THE INSPECTOR IN THE FIELD.

CAUTION NOTES @ CROSSINGS

- CAUTION: EXIST. WATERMAIN CROSSING (CPU)
- CAUTION: EXIST. GAS CROSSING (NMNG)
- CAUTION: EXIST. SANITARY SEWER CROSSING (HSDS)
- CAUTION: EXIST. STORM SEWER CROSSING (CC)
- CAUTION: PROPOSED STORM SEWER CROSSING
- CAUTION: EXIST. STORM SEWER SCHEDULED TO BE ABANDONED
- CAUTION: EXIST. STORM SEWER SCHEDULED TO BE REMOVED
- CAUTION: EXIST. TELEPHONE CROSSING (OWEST)
- CAUTION: EXIST. UNDERGROUND POWER CROSSING (CPU)

FOR ALL CROSSINGS:

VERIFY EXACT LOCATION AND ELEVATION PRIOR TO CONSTRUCTION. ANY CONFLICTS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER IMMEDIATELY.

MAINTAIN ALL MINIMUM CLEARANCES BETWEEN NEW WATERMANS AND EXISTING UTILITIES AS IDENTIFIED IN THE PLANS, DESCRIBED IN THE GENERAL NOTES, AND REQUIRED BY THE STANDARD SPECIFICATIONS.

PLAN INDICATES MAINLINE CROSSINGS ONLY. CONTRACTOR TO VERIFY LOCATION OF LATERALS AS REQUIRED.

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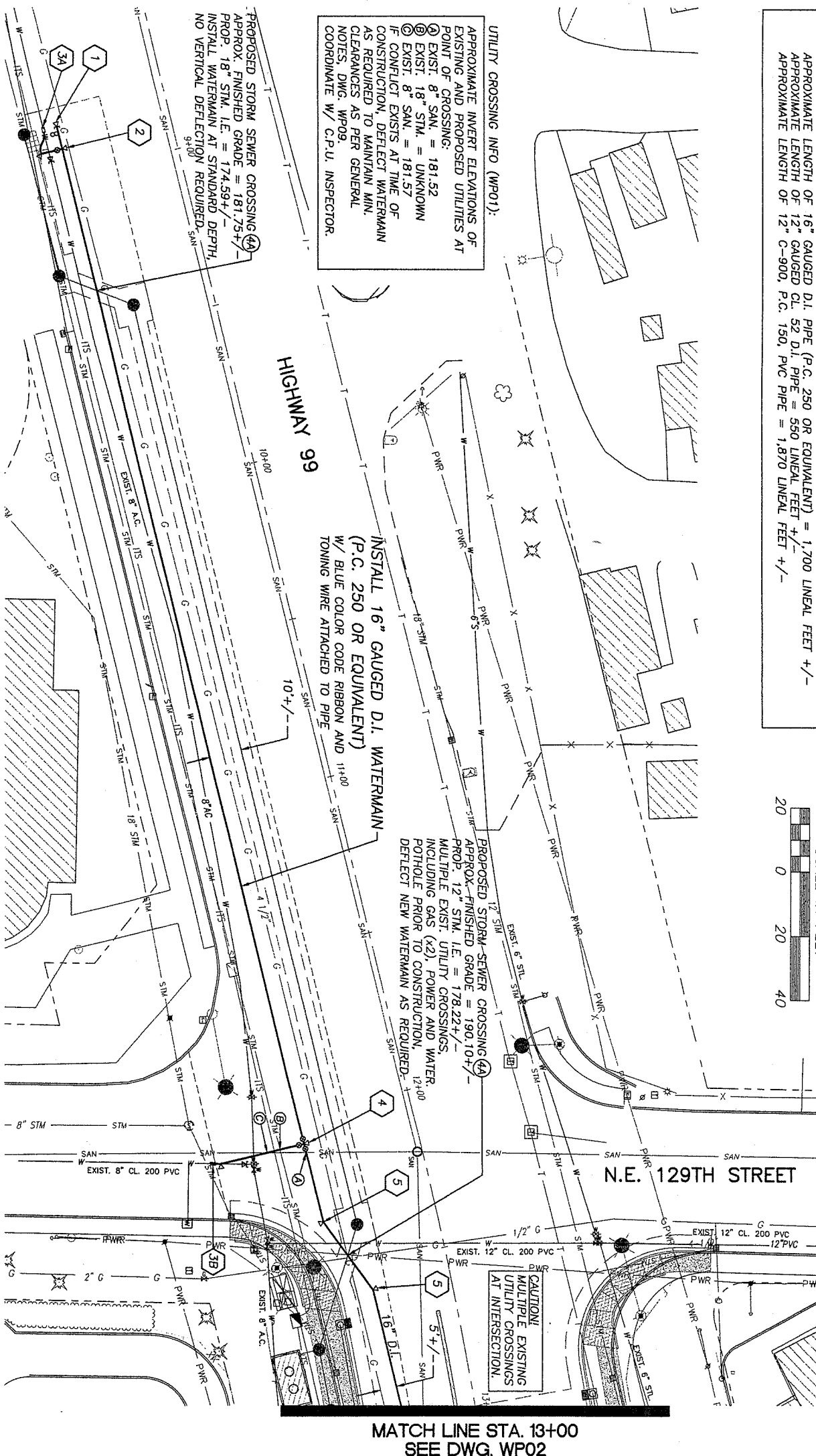
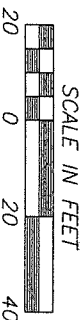
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CLARK PUBLIC UTILITIES - WATER

SIGNATURE: *[Signature]* DATE: 3/9/04

TOTAL PROJECT WATERMAIN TOTALS

APPROXIMATE LENGTH OF 16" GAUGED D.I. PIPE (P.C. 250 OR EQUIVALENT) = 1,700 LINEAL FEET +/-
APPROXIMATE LENGTH OF 12" GAUGED CL. 52 D.I. PIPE = 550 LINEAL FEET +/-
APPROXIMATE LENGTH OF 12" C-900, P.C. 150, PVC PIPE = 1,870 LINEAL FEET +/-



UTILITY CROSSING INFO (WP01):
APPROXIMATE INVERT ELEVATIONS OF EXISTING AND PROPOSED UTILITIES AT POINT OF CROSSING:
1 EXIST. 8" SAN. = 181.52
2 EXIST. 18" STA. = 181.57
3 EXIST. 8" SAN. = 181.57
IF CONFLICT EXISTS AT TIME OF CONSTRUCTION, DEFLECT WATERMAIN AS REQUIRED TO MAINTAIN MIN. CLEARANCES AS PER GENERAL NOTES, DWG. WP09.
COORDINATE W/ C.P.U. INSPECTOR.

PROPOSED STORM SEWER CROSSING (A)
APPROX. FINISHED GRADE = 190.10 +/-
PROP. 12" STM. I.E. = 178.22 +/-
MULTIPLE EXIST. UTILITY CROSSINGS INCLUDING GAS (12), POWER AND WATER. POT HOLE PRIOR TO CONSTRUCTION, 12x10. DEFLECT NEW WATERMAIN AS REQUIRED.

MATCH LINE STA. 13+00
SEE DWG. WP02

PROJECT CONSTRUCTION NOTES - DWG. WP01

NO. OF LOCATIONS ON DWG. WP01 ONLY (SEE * NOTE.)	ASSEMBLY REFERENCE NUMBER # AND DESCRIPTION	NO. OF LOCATIONS ON DWG. WP01 ONLY (SEE * NOTE.)	ASSEMBLY REFERENCE NUMBER # AND DESCRIPTION
1	1 - STD. PERPENDICULAR BLOW-OFF ASSEMBLY, INCLUDING MAIN CAP AND THRUST BLOCK.	1	4 - 1 - 16" x 8" C.I. TEE, FLG. W/ MEGALUG RETAINER GLANDS 2 - 16" B.F.V., FLG. x M.J. W/ MEGALUG RETAINER GLANDS 1 - 8" G.V., FLG. x M.J. W/ MEGALUG RETAINER GLANDS 1 - 8" 90° C.I. ELBOW, M.J. W/ MEGALUG RETAINER GLANDS 1 - VALVE BOX TOP W/ 6" PVC PIPE EXT. 2 - THRUST BLOCK APPROX. 10 L.F. 8" C-900, P.C. 150 PVC PIPE
1	2 - 1 - 16" x 8" C.I. TEE, M.J. x SIDE FLG. 1 - 8" G.V., FLG. x M.J. W/ MEGALUG RETAINER GLANDS 1 - 8" 90° C.I. ELBOW, M.J. W/ MEGALUG RETAINER GLANDS 1 - VALVE BOX TOP W/ 6" PVC PIPE EXT. 2 - THRUST BLOCK APPROX. 10 L.F. 8" C-900, P.C. 150 PVC PIPE	2	5 - 1 - 16" x 8" C.I. TEE, FLG. W/ MEGALUG RETAINER GLANDS 2 - 16" B.F.V., FLG. x M.J. W/ MEGALUG RETAINER GLANDS 1 - 8" G.V., FLG. x M.J. W/ MEGALUG RETAINER GLANDS 1 - 8" 11 1/4° C.I. BEND, M.J. W/ MEGALUG RETAINER GLANDS 3 - VALVE BOX TOP W/ 6" PVC PIPE EXT. 2 - THRUST BLOCK APPROX. 30 L.F. 8" C.I. 52 D.I. PIPE NOTE: PIPE SHALL BE RESTRAINED AT THE JOINTS WITH FIELD-LOK (TM) GASKET INSTANT JOINT RESTRAINT FOR D.I. PIPE, EAST (APPROX. 30 L.F.) TO TRANSITION SLEEVE AND NORTH (APPROX. 50 L.F.) TO SECOND BEND.
1	3A - UPON SATISFACTORY TESTING AND ACCEPTANCE OF NEW MAIN, CUT EXIST. PIPE AND CONNECT NEW C-900 PVC TO EXIST. PIPE WITH: 3B = 8" LONG PATTERN TRANSITION SLEEVE, M.J. (CL. 52 D.I./CL. 200 PVC) 3C = 8" LONG PATTERN TRANSITION SLEEVE, M.J. (C-900 PVC/CL. 200 PVC) 3D = 12" LONG PATTERN SLEEVE, M.J. (C-900 PVC)		
0	ABANDON EXIST. LINE WITH END CAP AND THRUST BLOCK PER C.P.U. REQUIREMENTS.		
0			

* NOTE: THE NO. OF LOCATIONS REFERS TO ONLY THE ITEMS IDENTIFIED WITH # AND DOES NOT INCLUDE ITEMS CALLED OUT INDEPENDENTLY ON THE PLAN.

DESIGN & ENGINEERING DIVISION
DESIGN SECTION

WATERMAIN PLAN - N.E. HWY. 99
STA. 9+00 TO STA. 13+00



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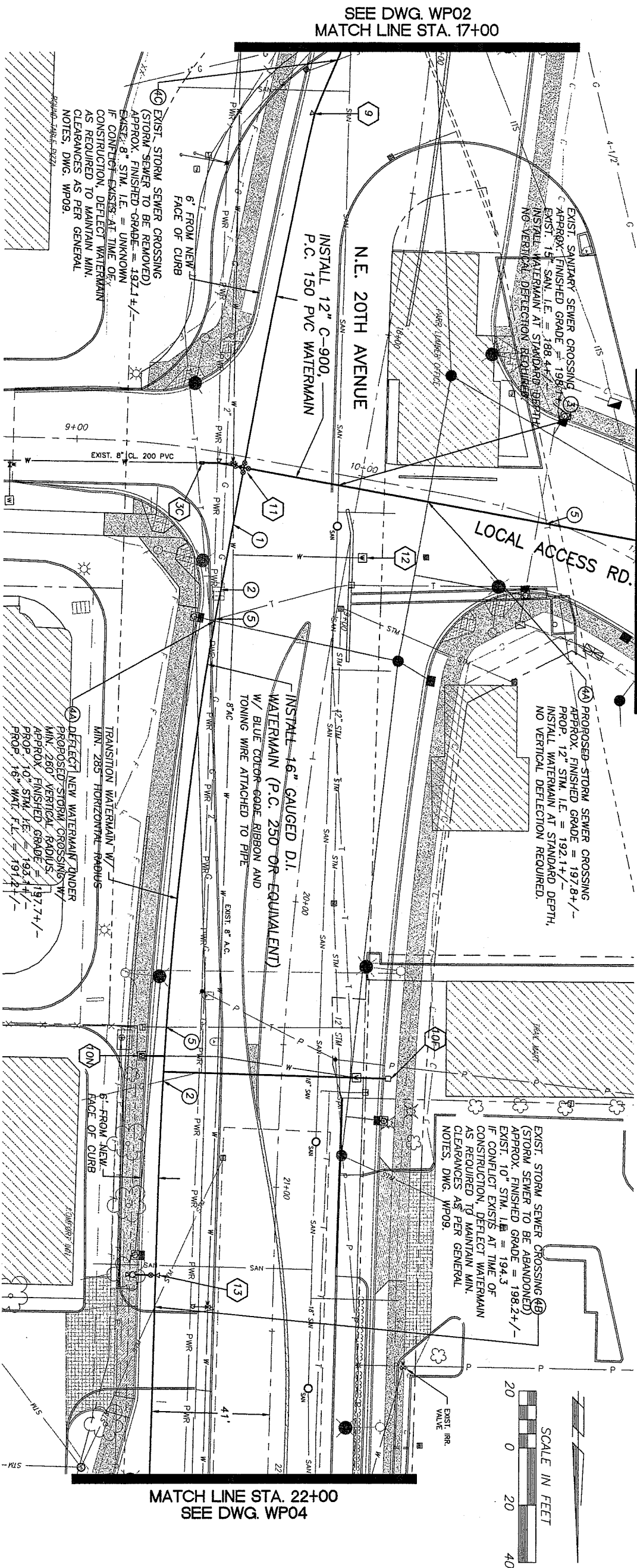
NORTHWEST UTILITIES NOTIFICATION CENTER

DESIGNED	JDB
DRAWN	JDB
CRP	392922
HOR.	1" = 20'
VERT.	N/A
DATE	3/9/04
DWG.	WP01
SHEET	74 OF 84



REVISION NO.1 - 3/9/04

SEE DWG. WP08
MATCH LINE STA. 11+00



PROJECT CONSTRUCTION NOTES - DWG. WP03

NO. OF LOCATIONS ON DWG. WP03 ONLY (SEE * NOTE.)		ASSEMBLY REFERENCE NUMBER (#) AND DESCRIPTION	NO. OF LOCATIONS ON DWG. WP03 ONLY (SEE * NOTE.)		ASSEMBLY REFERENCE NUMBER (#) AND DESCRIPTION
0		3A UPON SATISFACTORY TESTING AND ACCEPTANCE OF NEW MAIN, CUT EXIST. PIPE AND CONNECT NEW C-900 PVC TO EXIST. PIPE WITH:	1		11 1 - 16" x 12" C.I. CROSS, FLG. 2 - 16" B.F.V., FLG. x M.J. W/ MEGALUG RETAINER GLANDS 1 - 12" B.F.V., FLG. x M.J. W/ MEGALUG RETAINER GLANDS 1 - 12" x 8" REDUCER, FLG. 1 - 8" G.V., FLG. x M.J. W/ MEGALUG RETAINER GLANDS 1 - 8", 11 1/4" C.I. BEND, M.J. W/ MEGALUG RETAINER GLANDS 4 - VALVE BOX TOP W/ 6" PVC PIPE EXT. 1 - THRUST BLOCK APPROX. 10 L.F. 8" C-900, P.C. 150 PVC PIPE
0		3B 3A = 8" LONG PATTERN TRANSITION SLEEVE, M.J. (CL. 52 D.I./CL. 200 PVC)	1		12 REMOVE EXIST. METER AND BOX AND ABANDON EXIST. SERVICE AS PER C.P.U. REQUIREMENTS.
1		3C 3C = 8" LONG PATTERN TRANSITION SLEEVE, M.J. (C-900 PVC/CL. 200 PVC)			13 1 - STD. FIRE HYDRANT ASSEMBLY W/ 16" x 6" C.I. TEE, M.J. x SIDE FLG. AND 6" G.V., FLG. x M.J. W/ MEGALUG RETAINER GLANDS (LOCATE HYDRANT AS DIRECTED BY THE INSPECTOR). UPON SATISFACTORY TESTING AND ACCEPTANCE OF NEW MAIN, REMOVE EXIST. FIRE HYDRANT AND RETURN TO CLARK PUBLIC UTILITIES.
0		3D 3D = 12" LONG PATTERN SLEEVE, M.J. (C-900 PVC)			
1		9 1 - 16" 11 1/4" C.I. BEND, M.J. W/ MEGALUG RETAINER GLANDS			
1		10N 1 - 16" x 1" SERVICE CLAMP W/ 1" CORP. STOP (AS PER STD. WATER SERVICE), TRANSFER EXIST. WATER SERVICE LINE TO NEW TAP FOLLOWING TESTING AND ACCEPTANCE OF NEW MAIN. EXIST. WATER SERVICES OTHER THAN 1" P.E. CLASS 200 PIPE SHALL BE REPLACED AND NEW SERVICE EXTENDED TO THE METER. TRANSFER SERVICE AFTER SATISFACTORY TESTING. FOR FAR SIDE AND EXTENDED SERVICES, CONTRACTOR SHALL BORE OR PUSH EACH 1" SERVICE LINE. EACH METER TO HAVE INDIVIDUAL SERVICE AS PER CPU STANDARD DETAIL. RELOCATE EXIST. METER AS SHOWN, LOCATE WATER SERVICE LINE AND CONNECT NEW SERVICE LINE, BYPASS AND ABANDON EXIST. SERVICE			
1		10F 10F = FAR SIDE SERVICE (RELOCATED METER BOX)			

* NOTE: THE NO. OF LOCATIONS REFERS TO ONLY THE ITEMS IDENTIFIED WITH (#) AND DOES NOT INCLUDE ITEMS CALLED OUT INDEPENDENTLY ON THE PLAN.

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CLARK PUBLIC UTILITIES - WATER

SIGNATURE

DATE 3/4/04

DESIGN & ENGINEERING DIVISION
DESIGN SECTION

WATERMAIN PLAN - N.E. HWY. 99
STA. 17+00 TO STA. 22+00



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CRP 392922
HOR. 1" = 20'
VERT. N/A
DATE 3/9/04
DWG: WP03
SHEET 76 OF 84

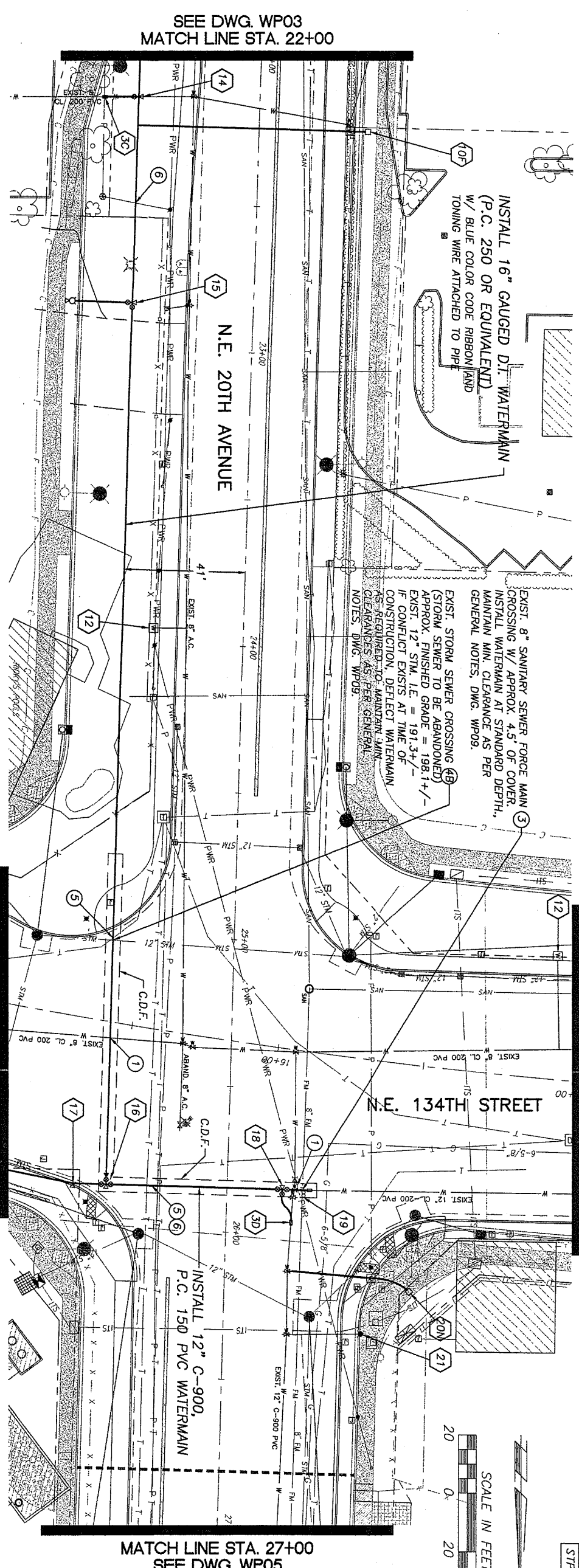
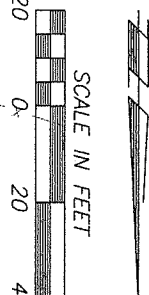


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SEE DWG. WP06

Fed. Aid No.
STP-42330101



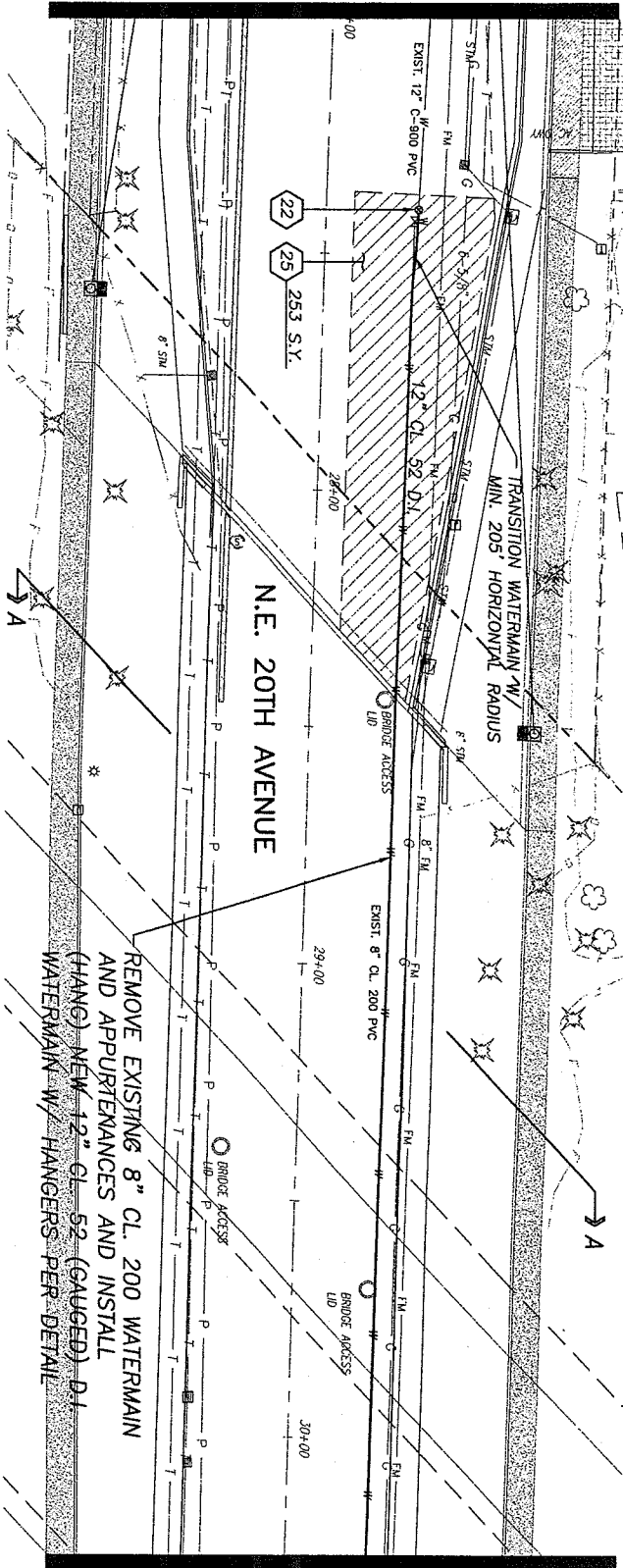
SEE DWG. WP03
MATCH LINE STA. 22+00

MATCH LINE STA. 27+00
SEE DWG. WP05

PROJECT CONSTRUCTION NOTES - DWG. WP04

NO. OF LOCATIONS ON DWG. WP04 ONLY (SEE * NOTE)	ASSEMBLY REFERENCE NUMBER (#) AND DESCRIPTION	NO. OF LOCATIONS ON DWG. WP04 ONLY (SEE * NOTE)	ASSEMBLY REFERENCE NUMBER (#) AND DESCRIPTION
0	3A UPON SATISFACTORY TESTING AND ACCEPTANCE OF NEW MAIN, CUT EXIST. PIPE AND CONNECT NEW C-900 PVC TO EXIST. PIPE WITH: 3A = 8" LONG PATTERN TRANSITION SLEEVE, M.J. (C-900 PVC/A.C.) 3B = 8" LONG PATTERN TRANSITION SLEEVE, M.J. (C-52 D.I./CL. 200 PVC) 3C = 8" LONG PATTERN TRANSITION SLEEVE, M.J. (C-900 PVC/CL. 200 PVC) 3D = 12" LONG PATTERN TRANSITION SLEEVE, M.J. (C-900 PVC) ABANDON EXIST. LINE WITH END CAP AND THRUST BLOCK PER C.P.U. REQUIREMENTS.	1	16 1 - 12" C.I. TEE, FLG. 3 - 12" B.F.V., FLG. x M.J. W/ MEGALUG RETAINER GLANDS 1 - 16" x 12" REDUCER, M.J.L.E.B. x P.E. W/ MEGALUG RETAINER GLANDS 3 - VALVE BOX TOP W/ 6" PVC PIPE EXT. NOTE: PIPE SHALL BE RESTRAINED AT THE JOINTS WITH FIELD-LOK (TM) GASKET INSTANT JOINT RESTRAINT FOR D.I. PIPE SOUTH OF REDUCER (APPROX. 80 L.F.).
0	3B	1	17 1 - 12", 11 1/4" C.I. BEND, M.J. W/ MEGALUG RETAINER GLANDS 1 - THRUST BLOCK
1	3C	1	18 1 - 12" C.I. TEE, FLG. (LOCATE AS DIRECTED BY THE INSPECTOR) 3 - 12" B.F.V., FLG. x M.J. W/ MEGALUG RETAINER GLANDS 3 - VALVE BOX TOP W/ 6" PVC PIPE EXT. 1 - THRUST BLOCK APPROX. 20 L.F. 12" C-900, P.C. 150 PVC PIPE (SPLIT NORTH AND WEST)
1	3D	1	19 1 - TEMP. STD. PERPENDICULAR BLOW-OFF ASSEMBLY, INCLUDING MAIN CAP AND THRUST BLOCK. UPON SATISFACTORY TESTING AND ACCEPTANCE OF NEW MAIN, REMOVE TEMP. BLOW-OFF ASSEMBLY, CUT EXIST. PIPE AND CONNECT NEW C-900 TO EXIST. PIPE WITH: 1 - 12" LONG PATTERN TRANSITION SLEEVE, M.J. (C-900 PVC/CL. 200 PVC) ABANDON EXIST. LINE WITH END CAP AND THRUST BLOCK AS PER C.P.U. REQUIREMENTS.
0	3E	1	20 RELOCATE EXIST. METER AS SHOWN AND/OR AS DIRECTED BY THE INSPECTOR. EXTEND LEAD AS NECESSARY. EXIST. WATER SERVICES OTHER THAN 2" SCH. 80 PVC PIPE SHALL BE REPLACED AND NEW SERVICE EXTENDED TO THE METER. TRANSFER SERVICE AFTER SATISFACTORY TESTING. EACH METER TO HAVE INDIVIDUAL SERVICE AS PER CPU STANDARD DETAIL.
1	3F	1	21 RELOCATE EXIST. FIRE HYDRANT AS DIRECTED BY THE INSPECTOR. EXTEND LEAD AS NECESSARY AND ADJUST ELEVATION TO FINISHED GRADE.
2	3G		
1	3H		
1	3I		
1	3J		
1	3K		
1	3L		
1	3M		
1	3N		
1	3O		
1	3P		
1	3Q		
1	3R		
1	3S		
1	3T		
1	3U		
1	3V		
1	3W		
1	3X		
1	3Y		
1	3Z		

SEE DWG. WP04
MATCH LINE STA. 27+00

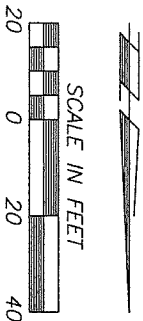
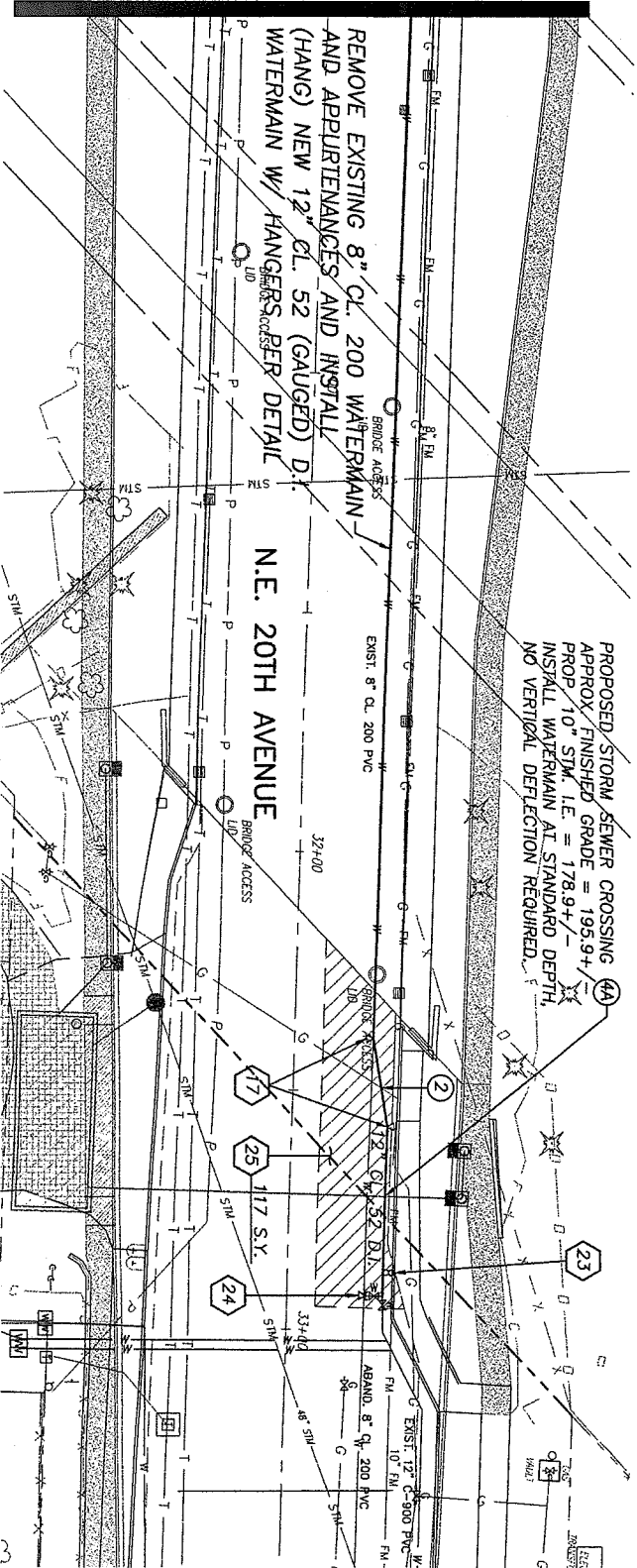


MATCH LINE - SEE BELOW

PROJECT CONSTRUCTION NOTES - DWG. WP05

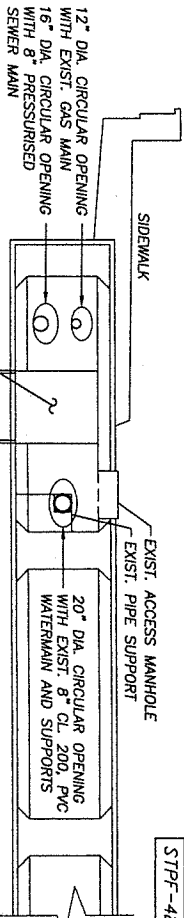
NO. OF LOCATIONS ON DWG. WP05 ONLY (SEE * NOTE.)	ASSEMBLY REFERENCE NUMBER AND DESCRIPTION
2	17 1 - 12", 11 1/4" C.I. BEND, M.J. W/ MEGALUG RETAINER GLANDS 1 - THRUST BLOCK
1	22 REMOVE EXIST. 12" x 8" REDUCER AND 8" GATE VALVE. CONNECT TO EXIST. 12" C-900 PVC WATERMAIN WITH: 1 - 12" B.F.V., M.J. W/ MEGALUG RETAINER GLANDS 1 - VALVE BOX TOP W/ 6" PVC PIPE EXT. EXTEND NEW 12" CL 52 (GAUGED) D.I. WATERMAIN
1	23 1 - TEMP. STD. PERPENDICULAR BLOW-OFF ASSEMBLY, INCLUDING MAIN CAP AND THRUST BLOCK. UPON SATISFACTORY TESTING AND ACCEPTANCE OF NEW MAIN, REMOVE TEMP. BLOW-OFF ASSEMBLY IN ADDITION TO EXIST. END CAP AND THRUST BLOCK AND CONNECT TO EXIST. 12" x 8" FLANGED TEE WITH: 1 - 12" ADAPTER, FLG. x M.J. W/ MEGALUG RETAINER GLANDS
1	24 UPON SATISFACTORY TESTING AND ACCEPTANCE OF NEW WATERMAIN, CUT, CAP AND ABANDON EXIST. WATERMAIN WITH END CAP AND THRUST BLOCK PER C.P.U. REQUIREMENTS.
2	25 PLANE EXIST. ASPHALT PAVEMENT TO 0.15 FOOT DEPTH AND CONSTRUCT 0.15 FOOT A.C. OVERLAY FROM EDGE OF TRAVEL LANE TO SAW-CUT LINE WITHIN LIMITS SHOWN. SEE PLAN FOR QUANTITIES.

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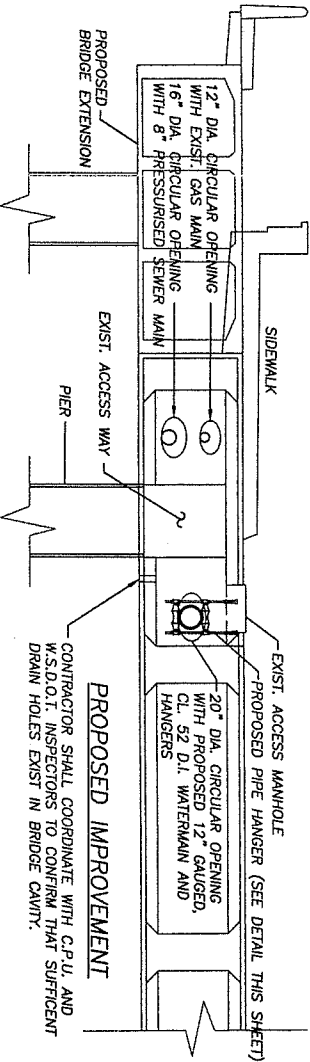
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CLARK PUBLIC UTILITIES - WATER
DATE 3/4/04

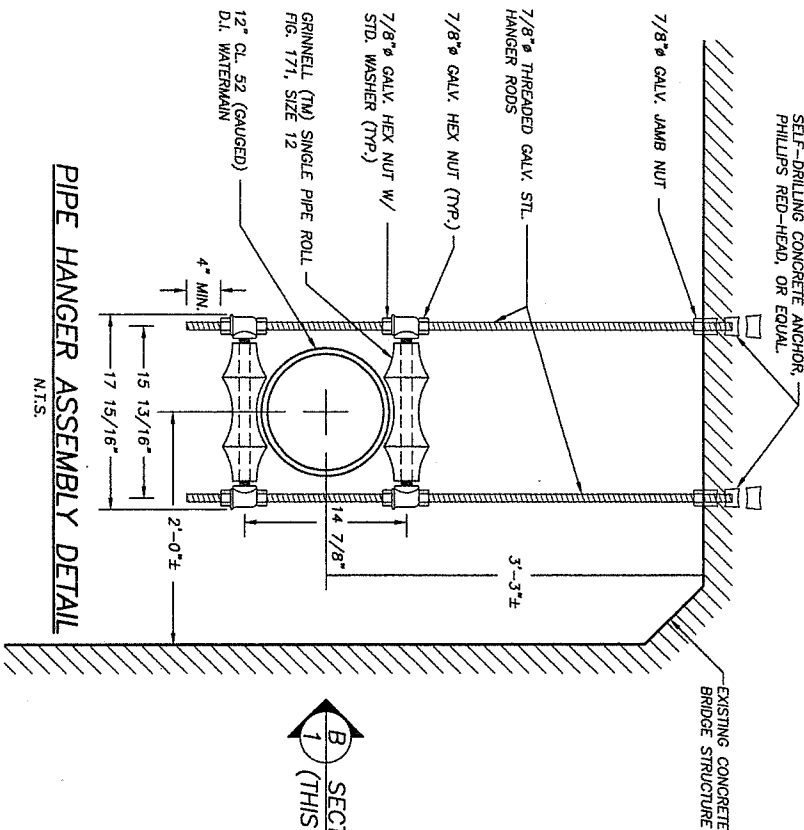


NOTE: REFER TO ORIGINAL W.S.O.D.T. DRAWINGS FOR FEDERAL AID PROJ. NO. EMP-205-1 (74) 14 SHEETS 295, 296, 299 AND 306 FOR FURTHER OVERPASS DETAILS. DESIGN DATE: 11/12/77

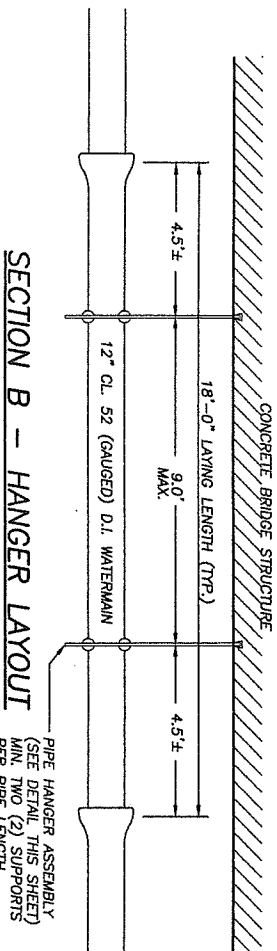
EXISTING SECTION A - I-205 OVERPASS (WEST CAVITY SECTION)
SECTION RUNS PARALLEL TO I-205 R.O.W.



PROPOSED SECTION A - I-205 OVERPASS (WEST CAVITY SECTION)
SECTION RUNS PARALLEL TO I-205 R.O.W.



PIPE HANGER ASSEMBLY DETAIL



SECTION B - HANGER LAYOUT

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DESIGN & ENGINEERING DIVISION
DESIGN SECTION

WATERMAIN PLAN - N.E. HWY. 99
STA. 27+00 TO STA. 33+00



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DWG: WP05
SHEET 78 OF 84

Fed. Aid No.
STP-425310101

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DATE 3/9/04
DWG: WP06
SHEET 79 OF 84



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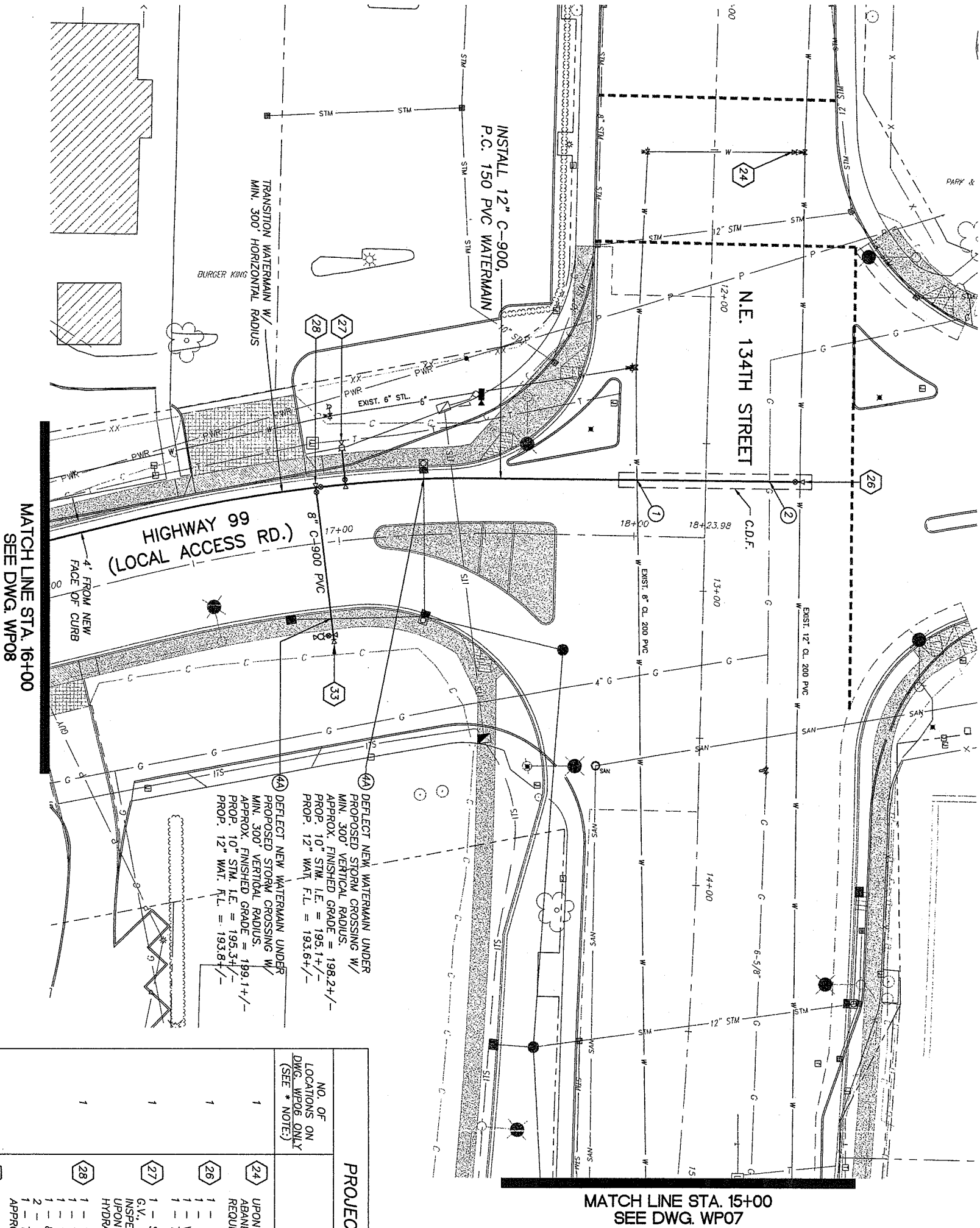
DESIGN & ENGINEERING DIVISION
DESIGN SECTION
WATERMAIN PLAN - N.E. 134TH ST.
STA. 11+00 TO STA. 15+00



PROJECT CONSTRUCTION NOTES - DWG. WP06	
NO. OF LOCATIONS ON DWG. WP06 ONLY (SEE * NOTE.)	ASSEMBLY REFERENCE NUMBER (#) AND DESCRIPTION
1	(24) UPON SATISFACTORY TESTING AND ACCEPTANCE OF NEW WATERMAIN, CUT, CAP AND ABANDON EXIST. WATERMAIN WITH END CAP AND THRUST BLOCK PER C.P.U. REQUIREMENTS.
1	(26) 1 - 12" S.S. TAPPING SLEEVE, FLG. (12" CL. 200 PVC) 1 - 12" TAPPING G.V., FLG. x M.J. W/ MEGALUG RETAINER GLANDS 1 - VALVE BOX TOP W/ 6" PVC PIPE EXT. 1 - THRUST BLOCK
1	(27) 1 - STD. FIRE HYDRANT ASSEMBLY W/ 12" x 6" C.I. TEE, M.J. x SIDE FLG., AND 6" G.V. FLG. x M.J. W/ MEGALUG RETAINER GLANDS (LOCATE HYDRANT AS DIRECTED BY THE INSPECTOR) UPON SATISFACTORY TESTING AND ACCEPTANCE OF NEW MAIN, REMOVE EXIST. FIRE HYDRANT AND RETURN TO CLARK PUBLIC UTILITIES.
1	(28) 1 - 12" x 8" C.I. TEE, FLG. 1 - 12" B.F.V., FLG. x M.J. W/ MEGALUG RETAINER GLANDS 1 - 12" ADAPTER, FLG. x M.J. W/ MEGALUG RETAINER GLANDS 1 - 8" G.V. FLG. x M.J. W/ MEGALUG RETAINER GLANDS 2 - VALVE BOX TOP W/ 6" PVC PIPE EXT. 1 - THRUST BLOCK APPROX. 50 L.F. 8" C-900, P.C. 150 PVC PIPE
1	(33) 1 - STD. FIRE HYDRANT ASSEMBLY W/ 8" x 6" C.I. TEE, FLG., AND 6" G.V. FLG. x M.J. W/ MEGALUG RETAINER GLANDS (LOCATE HYDRANT AS DIRECTED BY THE INSPECTOR). 1 - 8" ADAPTER, FLG. x M.J. W/ MEGALUG RETAINER GLANDS 1 - 8" BLIND FLANGE 1 - THRUST BLOCK NOTE: THE EAST SIDE THRUST BLOCK FOR THIS ASSEMBLY SHALL BE A PRE-POURED 3' x 4' CONCRETE BLOCK AS APPROVED BY CLARK PUBLIC UTILITIES.

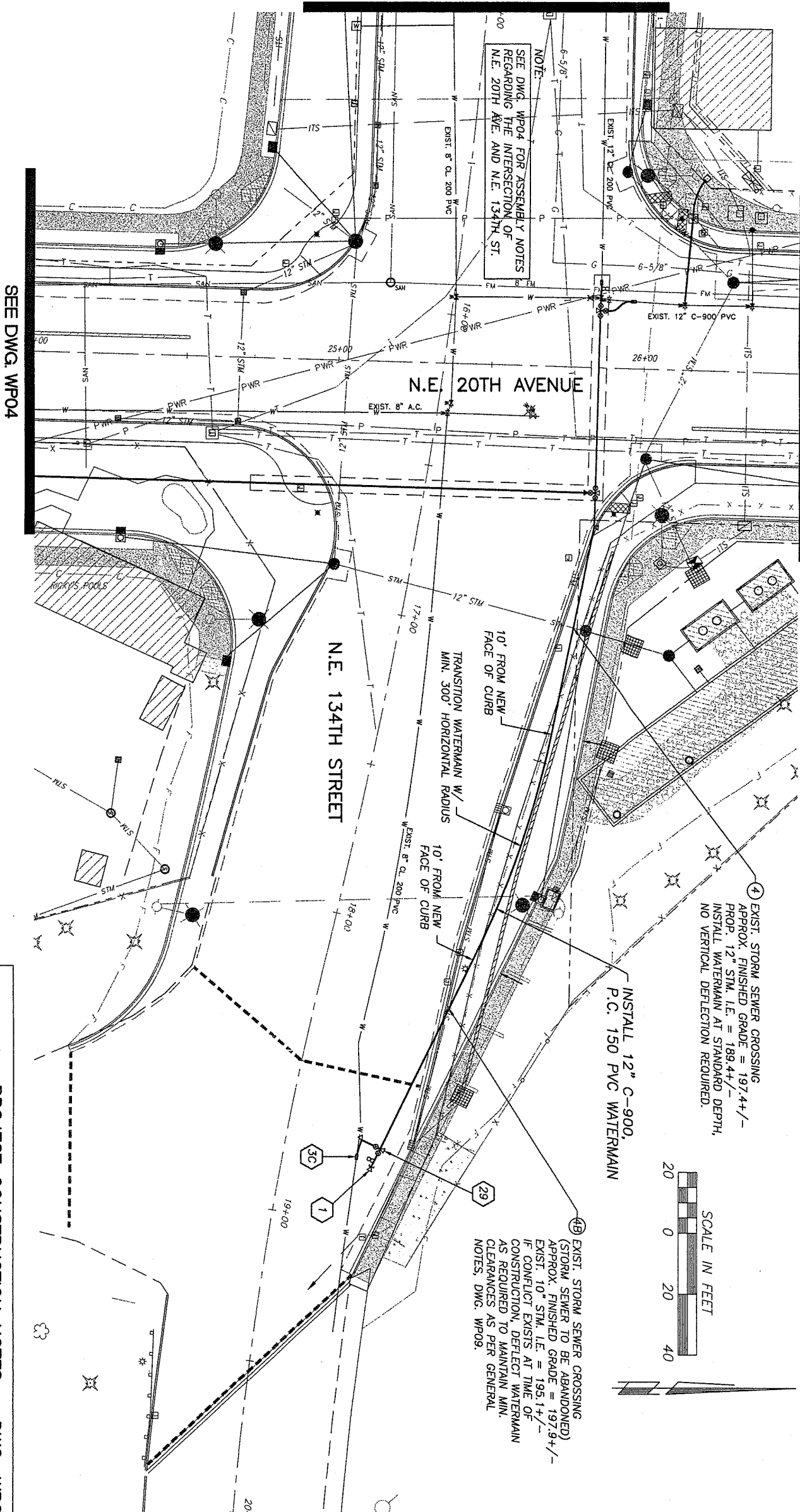
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REVISION NO.1 - 3/9/04



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CLARK PUBLIC UTILITIES - WATER
SIGNATURE: [Signature] DATE: 3/4/04

SEE DWG. WP06
MATCH LINE STA. 15+00



4 EXIST. STORM SEWER CROSSING
APPROX. FINISHED GRADE = 197.4+/-
PROP. 12" STM. I.E. = 189.4+/-
INSTALL WATERMAIN AT STANDARD DEPTH,
NO VERTICAL DEFLECTION REQUIRED.

1) EXIST. STORM SEWER CROSSING (STORM SEWER TO BE ABANDONED) APPROX. FINISHED GRADE = 197.9+/- EXIST. 10" STM. I.E. = 195.1+/- IF CONFLICT EXISTS AT TIME OF CONSTRUCTION, DEFLECT WATERMAIN AS REQUIRED TO MAINTAIN MIN. CLEARANCES AS PER GENERAL NOTES, DWG. WP09.

SCALE IN FEET

20 0 20 40

PROJECT CONSTRUCTION NOTES - DWG. WP07	
NO. OF LOCATIONS ON DWG. WP07 ONLY (SEE * NOTE.)	ASSEMBLY REFERENCE NUMBER (#) AND DESCRIPTION
1	1 - STD. PERPENDICULAR BLOW-OFF ASSEMBLY, INCLUDING MAIN CAP AND THRUST BLOCK.
0	UPON SATISFACTORY TESTING AND ACCEPTANCE OF NEW MAIN, CUT EXIST. PIPE AND CONNECT NEW C-900 PVC TO EXIST. PIPE WITH:
0	3A = 8" LONG PATTERN TRANSITION SLEEVE, M.J. (C-900 PVC/A.C.)
0	3B = 8" LONG PATTERN TRANSITION SLEEVE, M.J. (CL. 52 D.I./CL. 200 PVC)
1	3C = 8" LONG PATTERN TRANSITION SLEEVE, M.J. (C-900 PVC/CL. 200 PVC)
0	3D = 12" LONG PATTERN SLEEVE, M.J. (C-900 PVC)
	ABANDON EXIST. LINE WITH END CAP AND THRUST BLOCK PER C.P.U. REQUIREMENTS.
1	1 - 12" x 8" C.I. TEE, FLG.
	1 - 12" B.F.V., FLG. x M.J. w/ MEGALUG RETAINER GLANDS
	1 - 12" ADAPTER, FLG. x M.J. w/ MEGALUG RETAINER GLANDS
	1 - 8" G.V., FLG. x M.J. w/ MEGALUG RETAINER GLANDS
	1 - 8", 90° C.I. ELBOW, M.J. w/ MEGALUG RETAINER GLANDS
	2 - VALVE BOX TOP w/ 6" PVC PIPE EXT.
	2 - THRUST BLOCK
	APPROX. 10 L.F. 8" C-900, P.C. 150 PVC PIPE

* NOTE: THE NO. OF LOCATIONS REFERS TO ONLY THE ITEMS IDENTIFIED WITH AND DOES NOT INCLUDE ITEMS CALLED OUT INDEPENDENTLY ON THE PLAN.

Fed. Aid No.
STPF-425310107

REVISION NO.1 – 3/9/04



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STA. 15+00 TO STA. 19+00



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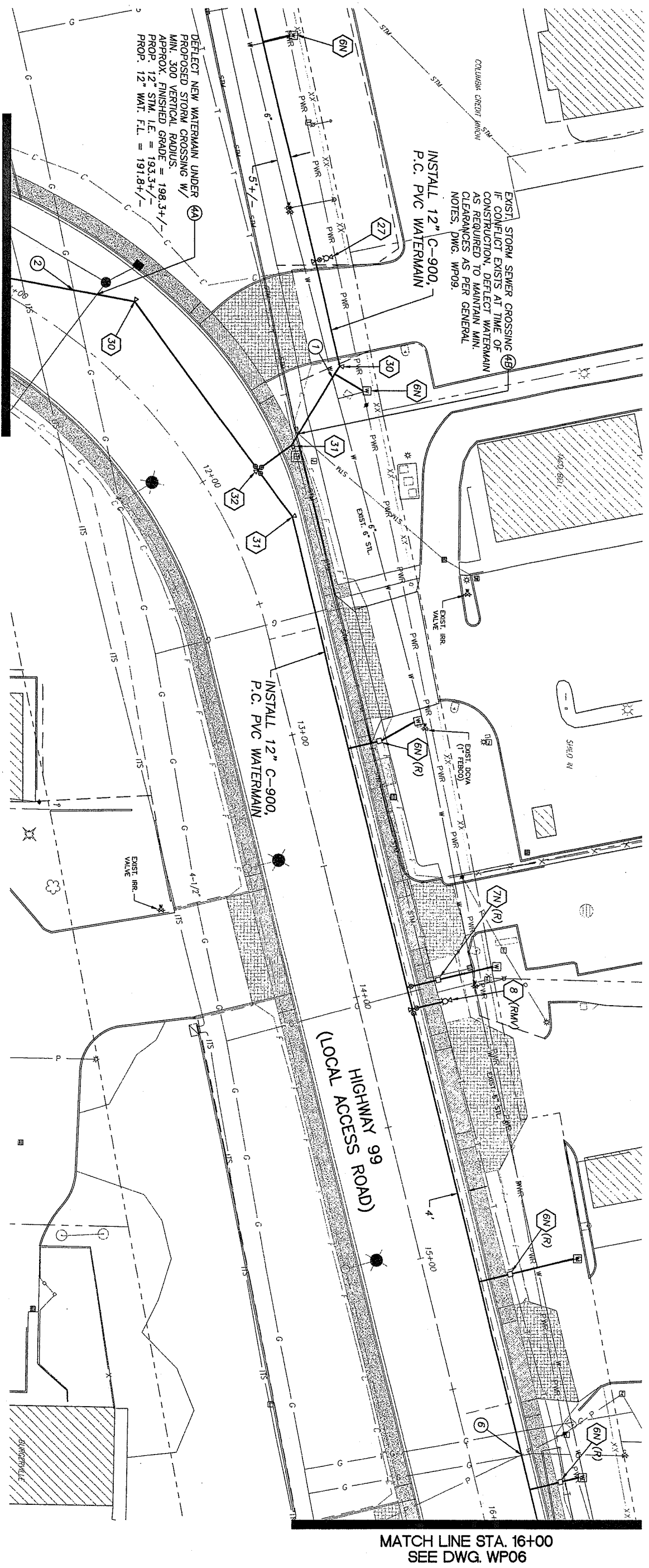


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UTILITIES**

DESIGNED	JDB
DRAWN	JDB
CRP	392922
HOR.	1" = 20'
VERT.	N/A
DATE	3/9/04
DWG:	WP07
SHEET	80 OF 84

Fed. Aid No.
STPF-425310101



MATCH LINE STA. 11+00
SEE DWG. WP03

MATCH LINE STA. 16+00
SEE DWG. WP06

PROJECT CONSTRUCTION NOTES - DWG. WP08

NO. OF LOCATIONS ON DWG. WP08 ONLY (SEE * NOTE)		ASSEMBLY REFERENCE NUMBER (#) AND DESCRIPTION	NO. OF LOCATIONS ON DWG. WP08 ONLY (SEE * NOTE)		ASSEMBLY REFERENCE NUMBER (#) AND DESCRIPTION
2		6N 1 - 12" x 1" SERVICE CLAMP W/ 1" CORP. STOP (AS PER STD. WATER SERVICE).	1		8 1 - STD. FIRE HYDRANT ASSEMBLY W/ 12" x 6" C.I. TEE, FLG., AND 6" G.V. FLG. x M.J. W/ MEGALUG RETAINER GLANDS (LOCATE HYDRANT AS DIRECTED BY THE INSPECTOR).
3		6N(R) OF NEW MAIN. EXIST. WATER SERVICES OTHER THAN 1" P.E. CLASS 200 PIPE SHALL BE REPLACED AND NEW SERVICE EXTENDED TO THE METER. TRANSFER SERVICE AFTER SATISFACTORY TESTING. FOR FAR SIDE AND EXTENDED SERVICES, CONTRACTOR SHALL BORE OR PUSH EACH 1" SERVICE LINE. EACH METER TO HAVE INDIVIDUAL SERVICE AS PER CPU STANDARD DETAIL. RELOCATE EXIST. METER AS SHOWN, LOCATE WATER SERVICE LINE AND CONNECT NEW SERVICE LINE, BYPASS AND ABANDON EXIST. SERVICE.	2		27 1 - STD. FIRE HYDRANT ASSEMBLY W/ 12" x 6" C.I. TEE, M.J. x SIDE FLG., AND 6" G.V., FLG. x M.J. W/ MEGALUG RETAINER GLANDS (LOCATE HYDRANT AS DIRECTED BY THE INSPECTOR).
0		7N 1 - 12" x 2" SERVICE SADDLE W/ 2" IRON BODY GATE VALVE (AS PER STD. WATER SERVICE). TRANSFER EXIST. WATER SERVICE LINE TO NEW TAP FOLLOWING TESTING AND ACCEPTANCE OF NEW MAIN. EXIST. WATER SERVICES OTHER THAN 2" SCH. 80 PVC PIPE SHALL BE REPLACED AND NEW SERVICE EXTENDED TO THE METER. TRANSFER SERVICE AFTER SATISFACTORY TESTING. EACH METER TO HAVE INDIVIDUAL SERVICE AS PER CPU STANDARD DETAIL. FOR RELOCATED METERS, LOCATE WATER SERVICE LINE AND CONNECT NEW SERVICE LINE, BYPASS AND ABANDON EXIST. SERVICE.	2		30 1 - 12" 45° C.I. BEND, M.J. W/ MEGALUG RETAINER GLANDS
1		7N (R) = NEAR SIDE SERVICE (RELOCATED METER BOX)	2		31 1 - 12" 22 1/2° C.I. BEND, M.J. W/ MEGALUG RETAINER GLANDS
			1		32 1 - 12" C.I. TEE, FLG. 3 - 12" B.F.V., FLG. x M.J. W/ MEGALUG RETAINER GLANDS 3 - VALVE BOX TOP W/ 6" PVC PIPE EXT. 1 - THRUST BLOCK

* NOTE: THE NO. OF LOCATIONS REFERS TO ONLY THE ITEMS IDENTIFIED WITH (#) AND DOES NOT INCLUDE ITEMS CALLED OUT INDEPENDENTLY ON THE PLAN.

Clark
Public
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APPROVED FOR CONSTRUCTION

CLARK PUBLIC UTILITIES - WATER

SIGNATURE: DATE: 3/9/04

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WATERMAIN PLAN - LOCAL ACCESS
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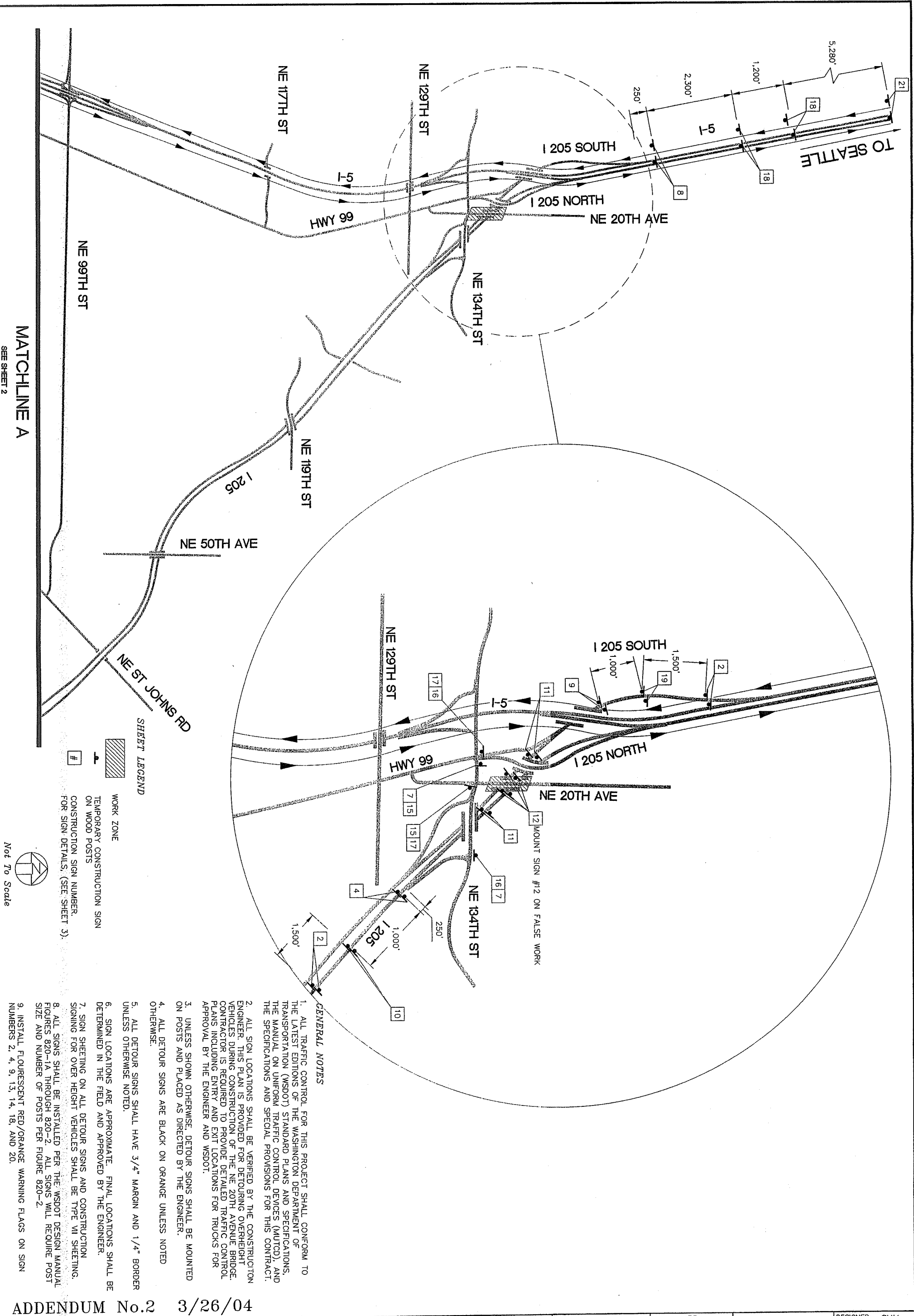
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STATE OF WASHINGTON
REGISTERED PROFESSIONAL ENGINEER
EXPIRES: 8/6/05

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DATE 3/9/04
DWG: WP08
SHEET 81 OF 84



ADDENDUM No.2 3/26/04



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DESIGN & ENGINEERING DIVISION DESIGN SECTION

OVERHEIGHT VEHICLE DETECTOR/WARNING SYSTEM
TRAFFIC DETOUR PLAN

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TRANSPORTATION SOLUTIONS

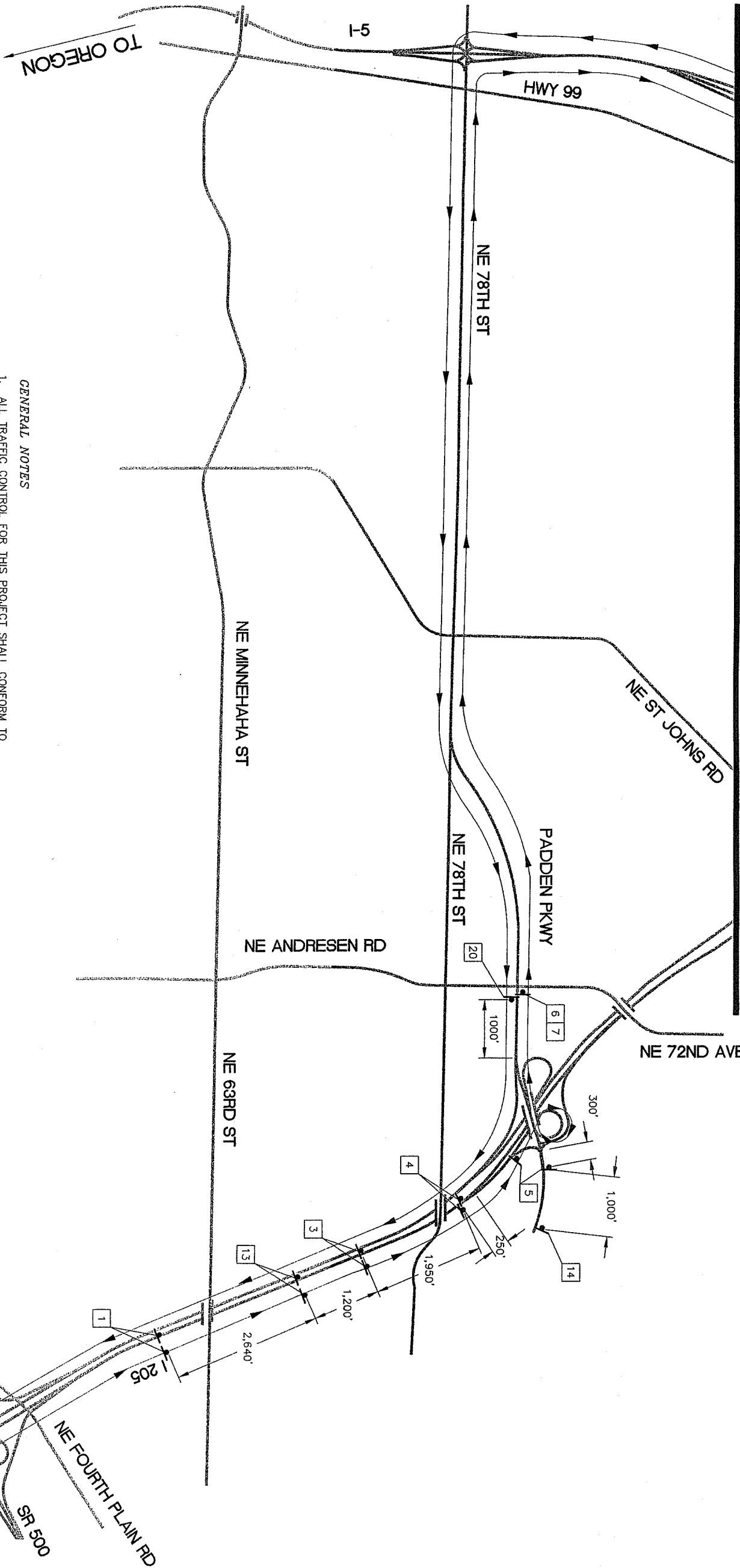
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CRP: 392922
HORIZ.
VERT.
DATE: 3/26/04
DWG: OVD1
SHEET 1 OF 11

MATCHLINE A
SEE SHEET 1



SHEET LEGEND

- WORK ZONE
- TEMPORARY CONSTRUCTION SIGN ON WOOD POSTS (SEE NOTE 8)
- CONSTRUCTION SIGN NUMBER. FOR SIGN DETAILS, (SEE SHEET 3).

GENERAL NOTES

1. ALL TRAFFIC CONTROL FOR THIS PROJECT SHALL CONFORM TO THE LATEST EDITIONS OF THE WASHINGTON DEPARTMENT OF TRANSPORTATION (WSDOT) STANDARD PLANS AND SPECIFICATIONS, THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), AND THE SPECIFICATIONS AND SPECIAL PROVISIONS FOR THIS CONTRACT.
2. ALL SIGN LOCATIONS SHALL BE VERIFIED BY THE CONSTRUCTION ENGINEER. THIS PLAN IS PROVIDED FOR DETOURING OVERHEIGHT VEHICLES DURING CONSTRUCTION OF THE NE 20TH AVENUE BRIDGE. CONTRACTOR IS REQUIRED TO PROVIDE DETAILED TRAFFIC CONTROL PLANS INCLUDING ENTRY AND EXIT LOCATIONS FOR TRUCKS FOR APPROVAL BY THE ENGINEER AND WSDOT.
3. UNLESS SHOWN OTHERWISE, DETOUR SIGNS SHALL BE MOUNTED ON POSTS AND PLACED AS DIRECTED BY THE ENGINEER.
4. ALL DETOUR SIGNS ARE BLACK ON ORANGE UNLESS NOTED OTHERWISE.
5. ALL DETOUR SIGNS SHALL HAVE 3/4" MARGIN AND 1/4" BORDER UNLESS OTHERWISE NOTED.
6. SIGN LOCATIONS ARE APPROXIMATE. FINAL LOCATIONS SHALL BE DETERMINED IN THE FIELD AND APPROVED BY THE ENGINEER.
7. SIGN SHEETING ON ALL DETOUR SIGNS AND CONSTRUCTION SIGNING FOR OVER HEIGHT VEHICLES SHALL BE TYPE VII SHEETING.
8. ALL SIGNS SHALL BE INSTALLED PER THE WSDOT DESIGN MANUAL FIGURES 820-1A THROUGH 820-2. ALL SIGNS WILL REQUIRE POST SIZE AND NUMBER OF POSTS PER FIGURE 820-2.
9. INSTALL FLOURESCENT RED/ORANGE WARNING FLAGS ON SIGN NUMBERS 2, 4, 9, 13, 14, 18, AND 20.

ADDENDUM No.2 3/26/04

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DESIGN & ENGINEERING DIVISION
DESIGN SECTION

OVERHEIGHT VEHICLE DETECTOR/WARNING SYSTEM
TRAFFIC DETOUR PLAN

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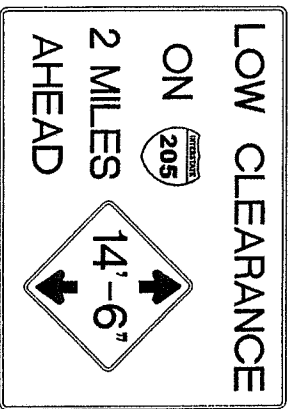
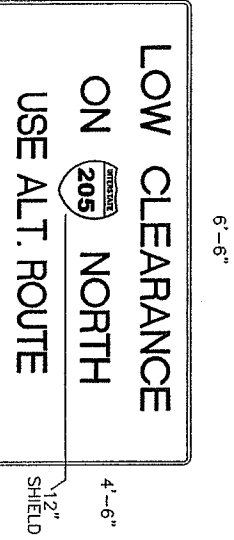
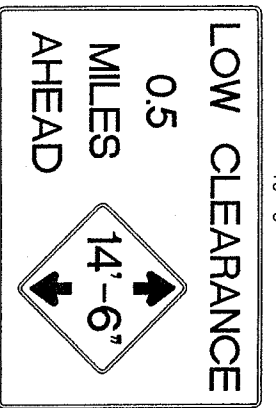
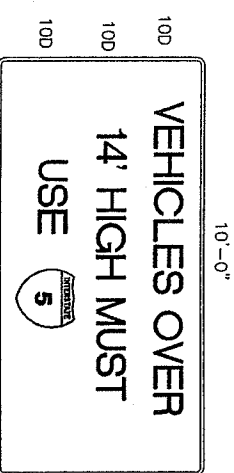
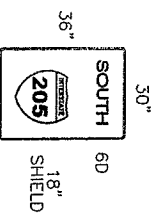
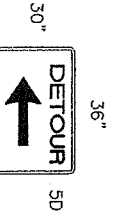
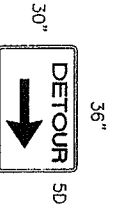
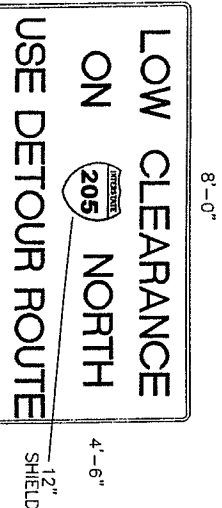
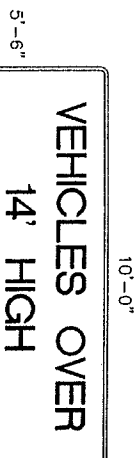
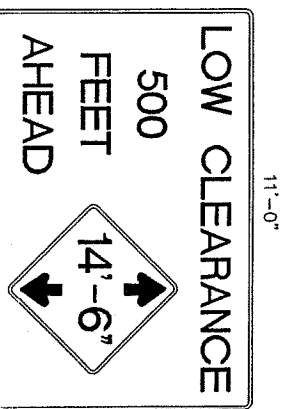
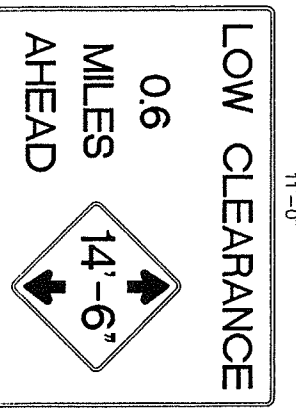
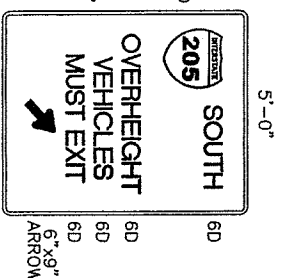
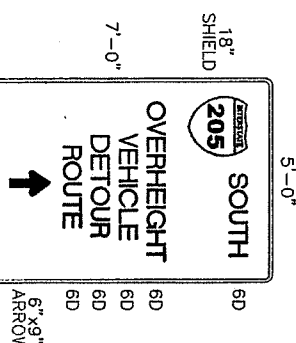
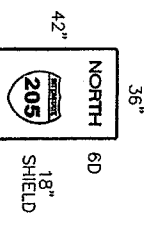
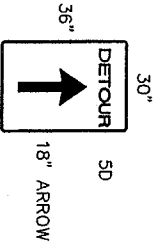
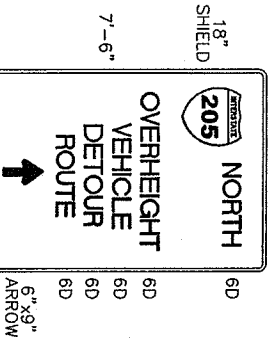
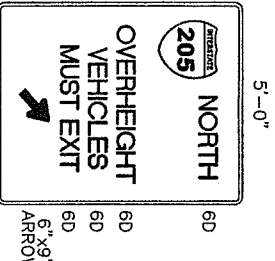
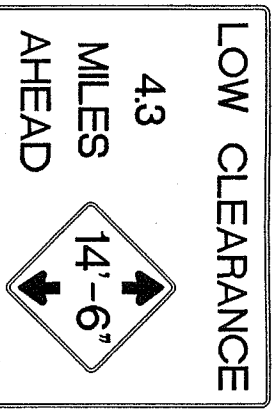
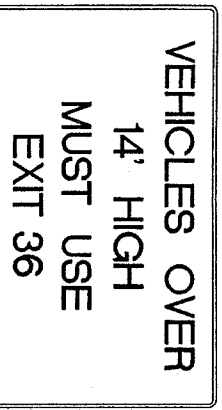
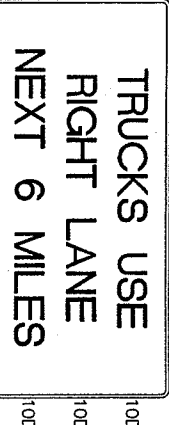
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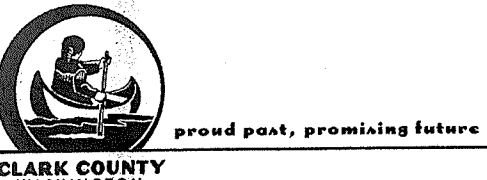
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CRP: *392922*
HORIZ.
VERT.
DATE: *3/26/04*
DWG: *OVD2*
SHEET 2 OF 11

Fed. Aid No.
STPF--4253(0101)



ADDENDUM No.2 3/26/04



DESIGN & ENGINEERING DIVISION
DESIGN SECTION
OVERHEIGHT VEHICLE DETECTOR/WARNING SYSTEM
TRAFFIC DETOUR SIGN DETAILS

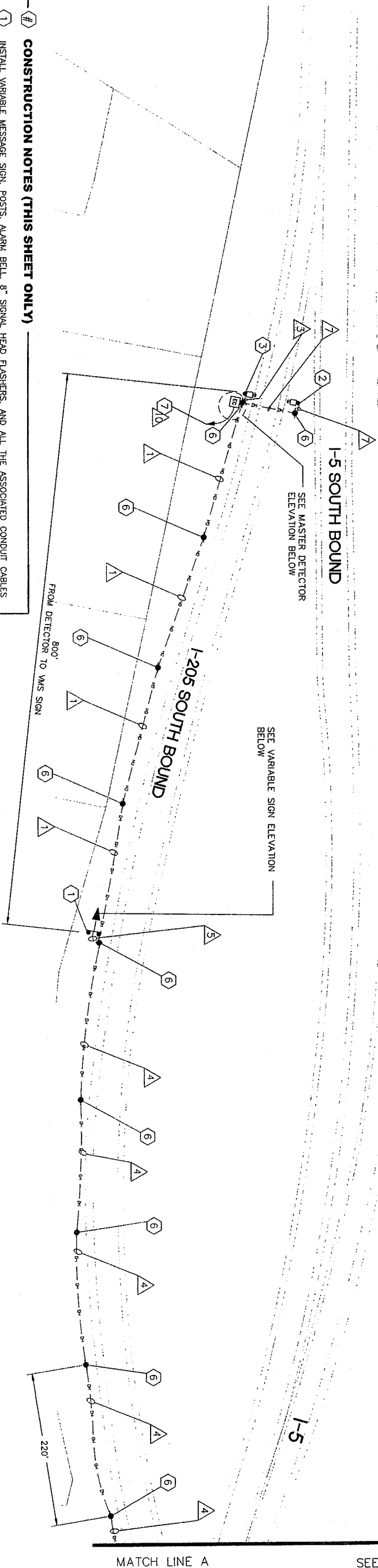
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SHEET 3 OF 11

I-5 NORTH BOUND






SEE SHEET 5



CONSTRUCTION NOTES (THIS SHEET ONLY)

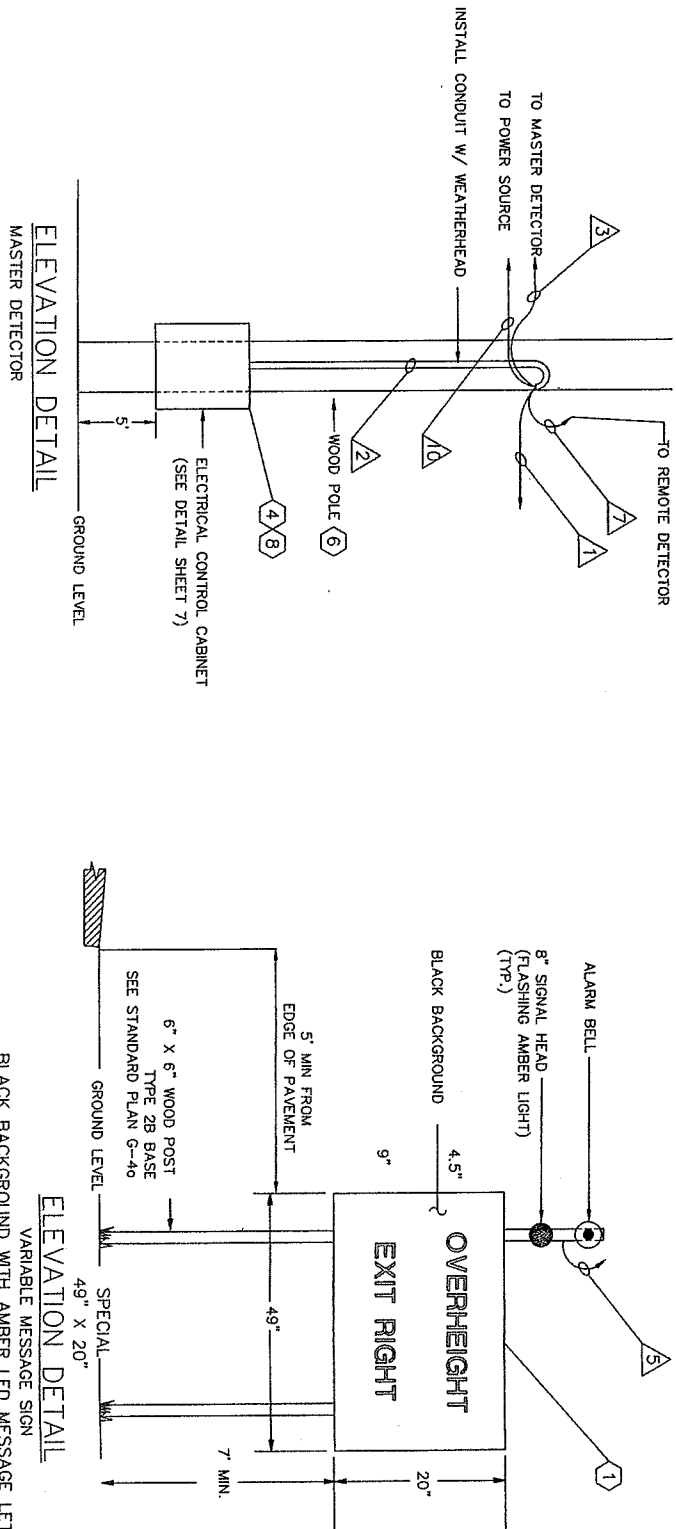
- ① INSTALL VARIABLE MESSAGE SIGN, POSTS, ALARM BELL, 8" SIGNAL HEAD FLASHERS, AND ALL THE ASSOCIATED CONDUIT CABLE AND HARDWARE PER SPECIAL PROVISIONS FOR THIS CONTRACT. SEE VARIABLE MESSAGE SIGN ELEVATION BELOW, FOR SYSTEM SCHEMATIC DIAGRAM.
- ② INSTALL REMOTE DETECTOR UNIT, TELESCOPING POLE AND ALL ASSOCIATED EQUIPMENT WITH ALL THE CONNECTIONS, SEE MASTER DETECTOR CABINET SYSTEM WIRING SCHEMATIC ON SHEET 8 AND SYSTEM SCHEMATIC DIAGRAM ON SHEET 11.
- ③ INSTALL MASTER DETECTOR UNIT, TELESCOPING POLE AND ALL THE ASSOCIATED EQUIPMENT WITH ALL THE CONNECTIONS. SEE MASTER DETECTOR CABINET SYSTEM WIRING SCHEMATIC ON SHEET 8 AND SYSTEM SCHEMATIC DIAGRAM ON SHEET 11.
- ④ INSTALL THE MASTER DETECTOR SYSTEM ELECTRICAL CONTROL CABINET ON THE WOOD POLE. PER DETAILS PER SPECIAL PROVISIONS FOR THIS CONTRACT. SEE CABINET DETAIL AND DETECTOR CABINET SCHEMATIC ON SHEETS 7 AND 8.
- ⑤ INSTALL 80' CLASS 4 TIMBER POLE. (POLE SHALL BE PLACED OUTSIDE OF CLEAR ZONE PER WSDOT DESIGN MANUAL, FIGURE 700-1 OR BE PROTECTED) PER WSDOT STANDARD SPECIFICATIONS FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION, AND THE SPECIAL PROVISIONS OF THIS CONTRACT. POLE SPACING IS 200 ± UNLESS NOTED OTHERWISE.
- ⑥ INSTALL 30' CLASS 5 TIMBER CABLE. (POLE SHALL BE PLACED OUTSIDE OF CLEAR ZONE PER WSDOT DESIGN MANUAL, FIGURE 700-1 OR BE PROTECTED) PER WSDOT STANDARD SPECIFICATIONS FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION, AND THE SPECIAL PROVISIONS OF THIS CONTRACT. POLE SPACING IS 200 ± UNLESS NOTED OTHERWISE.
- ⑦ FURNISH AND INSTALL 1,860 FEET OF 3/4" AERIAL CABLE AND ASSOCIATED WOOD POLES TO OVERHEAD TRANSFORMER ON CPU#4. POLE #40752 LOCATED ON NE 139TH STREET.
- ⑧ FURNISH AND INSTALL 480V TO 120V TRANSFORMER IN ELECTRICAL CONTROL CABINET.

LEGEND

- 




- TIMBER POLE SEE CONSTRUCTION 5 & 6
 POLE MOUNTED ELECTRICAL CONTROL CABINET
 WARNING HORN (SIREN) AND STROBE LIGHT
 CLEAR HEIGHT DETECTOR INSTALLED OUTSIDE OF
 CLEAR ZONE PER WSDOT DESIGN MANUAL
 VARIABLE MESSAGE SIGN WITH ALARM BELL
 AND FLASHERS
 AERIAL CABLE

GENERAL NOTES:

1. ALL WORK SHALL CONFORM TO THE REQUIREMENTS AND SPECIFICATIONS OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D.), LATEST WSDOT APPROVED EDITION AND THE WSDOT STANDARD SPECIFICATIONS FOR ROAD, BRIDGE AND MUNICIPAL CONSTRUCTION ALONG WITH THE SPECIAL PROVISIONS OF THIS CONTRACT.
2. COORDINATE ALL WORK WITH CLARK COUNTY PUBLIC UTILITIES TO ELIMINATE CONFLICTS. CONTACT DALE MICKELSON AT CPU (360) 992-8819.
3. ALL POLE LOCATIONS ARE APPROXIMATE. VERIFY THAT THERE IS NO UTILITY CONFLICT PRIOR TO THE INSTALLATION OF ALL POLES.
4. ALL CONDUCTORS/CABLES SHALL BE OUTDOOR RATED AND SUNLIGHT RESISTANT FOR OVERHEAD USE.
5. GUNNING AND BRACING OF WOOD POLES SHALL BE REQUIRED WHERE SUFFICIENT STRENGTH IS NOT AVAILABLE TO SUPPORT THE LOAD. GUNNING AND BRACING MUST BE INSTALLED BASED ON NESC STANDARDS.



WIRE NOTES

WIRE NOTES		CONDUCTOR/ CABLE	REMARK
RUN NO.	CONDUIT		
1	AERIAL 3/8" M.C.	1-3C-#8 1-4C-#12 1-3C-#2 1-2C #18 SHTW 3-#8 1-3C-#12 1-3C-#8 1-3C-#2 1-4C-#12 1-3C-#10	FOR COMMUNICATION AND POWER FOR SIGN SIGNAL HEADS CONTROL FOR HORN AND STROBE LIGHT CONTROL FOR SIGN AND ALARM FOR COMMUNICATION AND POWER COMMUNICATION TO REMOTE DETECTOR POWER TO CABINET FROM TRANSFORMER POWER TO REMOTE DETECTOR FOR COMMUNICATION AND POWER FOR SIGN SIGNAL HEADS POWER TO CABINET FROM SIGN COMMUNICATION TO CABINET FOR SIGN CONTROL FOR HORN AND STROBE LIGHT
2	4"	1-3C-#12 1-4C-#12 1-4C-#12 1-3C-#10	POWER TO MASTER DETECTOR COMMUNICATION TO MASTER DETECTOR COMMUNICATION TO HORN AND STROBE LIGHT FROM MASTER DETECTOR CONTROL FOR HORN AND STROBE LIGHT
3	AERIAL 3/8" M.C.	1-2C #18 SHTW 1-4C-#12 1-4C-#12 1-3C-#8 1-3C-#2 1-3C-#12	COMMUNICATION TO HORN AND STROBE LIGHT CONTROL FOR HORN AND STROBE LIGHT FOR COMMUNICATION AND POWER FOR SIGN SIGNAL HEADS CONTROL FOR SIGN AND ALARM FOR COMMUNICATION AND POWER POWER TO REMOTE DETECTOR
4	AERIAL 3/8" M.C.	1-3C-#12 1-3C-#8 1-3C-#2 1-3C-#12	COMMUNICATION TO REMOTE DETECTOR POWER TO REMOTE DETECTOR CONTROL FOR HORN AND STROBE LIGHT COMMUNICATION TO REMOTE DETECTOR
5	AERIAL 3/8" M.C.	1-2C #18 SHTW 1-3C-#12 1-3C-#12 1-4C-#12 3-#8	POWER TO MASTER DETECTOR CONTROL FOR HORN AND STROBE LIGHT POWER TO CABINET FROM TRANSFORMER POWER TO REMOTE DETECTOR COMMUNICATION TO REMOTE DETECTOR
6	AERIAL 3/8" M.C.	1-3C-#12 1-3C-#8 1-3C-#2 1-3C-#12 3-#8	POWER TO MASTER DETECTOR CONTROL FOR HORN AND STROBE LIGHT POWER TO CABINET FROM TRANSFORMER POWER TO REMOTE DETECTOR COMMUNICATION TO REMOTE DETECTOR
7	AERIAL 3/8" M.C.	1-2C #18 SHTW 3-#8	POWER TO CABINET FROM CPU TRANSFORMER POWER TO CABINET FROM CPU TRANSFORMER
8	AERIAL 3/8" M.C.	2/0	POWER TO CABINET FROM CPU TRANSFORMER
9	AERIAL 3/8" M.C.	3-#4	POWER TO CABINET FROM CPU TRANSFORMER
10	AERIAL 3/8" M.C.	3-#4	POWER TO CABINET FROM CPU TRANSFORMER

NOTE: ALL CONDUCTORS SHALL BE TYPE THHN

M.C. = MESSENGER CABLE
C = CONDUCTOR CABLE
SHTW = SHIELDED TWISTED PAIR

ELEVATION DETAIL
MASTER DETECTOR

BLACK BACKGROUND WITH AMBER LED MESSAGE LETTERING

ELEVATION DE LA

ADDENDUM No.2 3/26/04



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DESIGN SECTION

OVERHEIGHT VEHICLE DETECTOR/WARNING SYSTEM
DETECTOR INTERCONNECT PLAN

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HORIZ.	
VERT.	
DATE:	3/26/04
DWG:	OVD4
SHEET 4	OF 11



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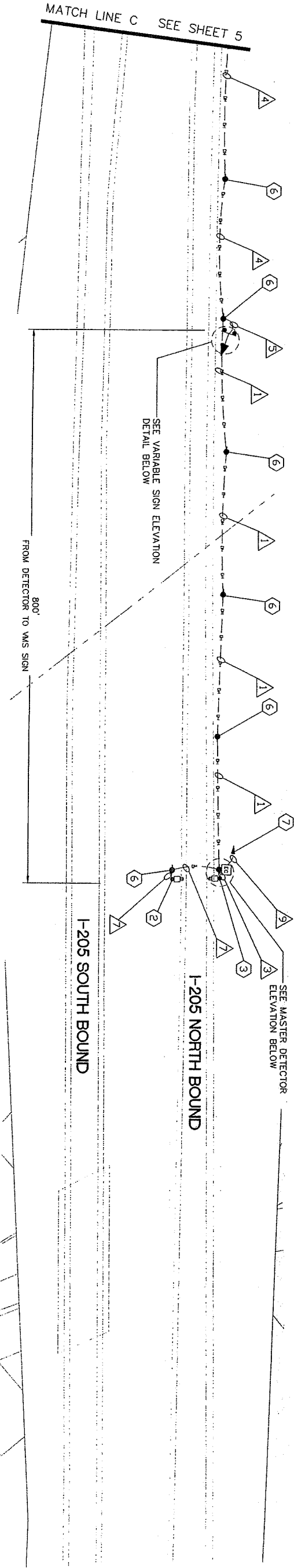
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DESIGN SECTION

OVERHEIGHT VEHICLE DETECTOR/WARNING SYSTEM
DETECTOR INTERCONNECT PLAN

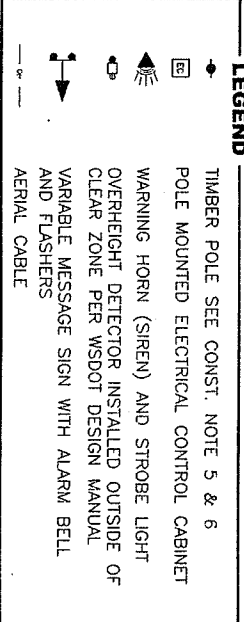


CLARK COUNTY
WASHINGTON

ADDENDUM No.2 3/26/04



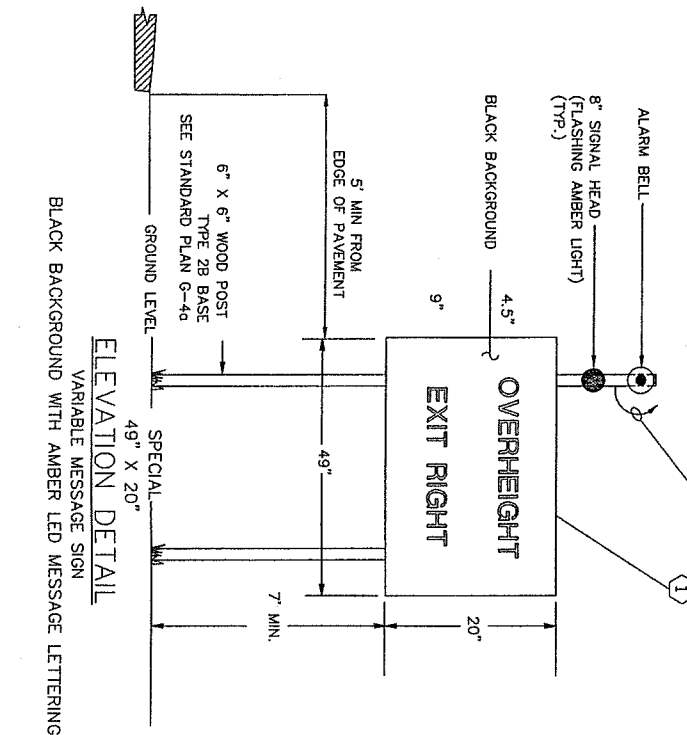
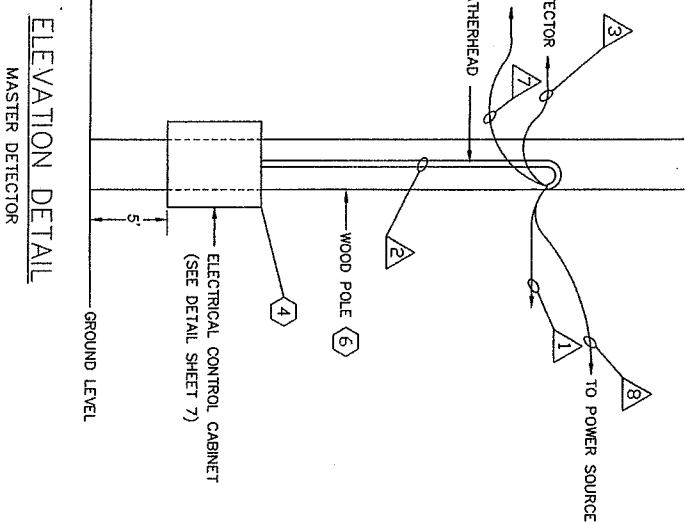
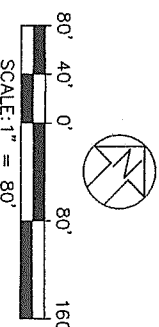
- CONSTRUCTION NOTES (THIS SHEET ONLY)**
1. INSTALL SIGN, POSTS, ALARM BELL, 8" SIGNAL HEAD FLASHERS, AND ALL THE ASSOCIATED CONDUIT CABLES AND HARDWARE PER SPECIAL PROVISIONS FOR THIS CONTRACT. SEE VARIABLE MESSAGE SIGN ELEVATION BELOW, FOR SYSTEM SCHEMATIC DIAGRAM.
 2. INSTALL REMOTE DETECTOR UNIT, TELESCOPING POLE AND ALL ASSOCIATED EQUIPMENT WITH ALL THE CONNECTIONS. SEE MASTER DETECTOR CABINET SYSTEM WIRING SCHEMATIC ON SHEET 8 AND SYSTEM SCHEMATIC DIAGRAM ON SHEET 11.
 3. INSTALL MASTER DETECTOR UNIT, TELESCOPING POLE AND ALL THE ASSOCIATED EQUIPMENT WITH ALL THE CONNECTIONS. SEE MASTER DETECTOR CABINET SYSTEM WIRING SCHEMATIC ON SHEET 8 AND SYSTEM SCHEMATIC DIAGRAM ON SHEET 11.
 4. INSTALL THE MASTER DETECTOR SYSTEM ELECTRICAL CONTROL CABINET ON THE WOOD POLE PER DETAILS PER SPECIAL PROVISIONS FOR THIS CONTRACT. SEE CABINET DETAIL AND DETECTOR CABINET SCHEMATIC ON SHEETS 7 AND 8.
 5. INSTALL 60' CLASS 4 TIMBER POLE. (POLE SHALL BE PLACED OUTSIDE OF CLEAR ZONE PER WSDOT DESIGN MANUAL FIGURE 700-1 OR BE PROTECTED) PER WSDOT STANDARD SPECIFICATIONS FOR ROAD, BRIDGE AND MUNICIPAL CONSTRUCTION, AND THE SPECIAL PROVISIONS OF THIS CONTRACT. POLE SPACING IS 200' ± UNLESS NOTED OTHERWISE.
 6. INSTALL 30' CLASS 5 TIMBER POLE. (POLE SHALL BE PLACED OUTSIDE OF CLEAR ZONE PER WSDOT DESIGN MANUAL FIGURE 700-1 OR BE PROTECTED) PER WSDOT STANDARD SPECIFICATIONS FOR ROAD, BRIDGE AND MUNICIPAL CONSTRUCTION, AND THE SPECIAL PROVISIONS OF THIS CONTRACT. POLE SPACING IS 200' ± UNLESS NOTED OTHERWISE.
 7. FURNISH AND INSTALL 1180' OF 3/8" AWG AERIAL CABLE AND ASSOCIATED WOOD POLES TO OVERHEAD TRANSFORMER ON CPU POLE LOCATED AT 12923 NE 27TH AVENUE.



- GENERAL NOTES:**
1. ALL WORK SHALL CONFORM TO THE REQUIREMENTS AND SPECIFICATIONS OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D.), LATEST WSDOT APPROVED EDITION AND THE WSDOT STANDARD SPECIFICATIONS FOR ROAD, BRIDGE AND MUNICIPAL CONSTRUCTION ALONG WITH THE SPECIAL PROVISIONS OF THIS CONTRACT.
 2. COORDINATE ALL WORK WITH CLARK COUNTY PUBLIC UTILITIES TO ELIMINATE CONFLICTS. CONTACT DALE MCKELSON AT CPU (360) 992-8919.
 3. ALL POLE LOCATIONS ARE APPROXIMATE. VERIFY THAT THERE IS NO UTILITY CONFLICT PRIOR TO THE INSTALLATION OF ALL POLES.
 4. ALL CONDUCTORS/CABLES SHALL BE OUTDOOR RATED AND SUNLIGHT RESISTANT FOR OVERHEAD USE.
 5. GUYING AND BRACING OF WOOD POLES SHALL BE REQUIRED WHERE SUFFICIENT STRENGTH IS NOT AVAILABLE TO SUPPORT THE LOAD. GUYING AND BRACING SHALL BE INSTALLED BASED ON NESC STANDARDS.

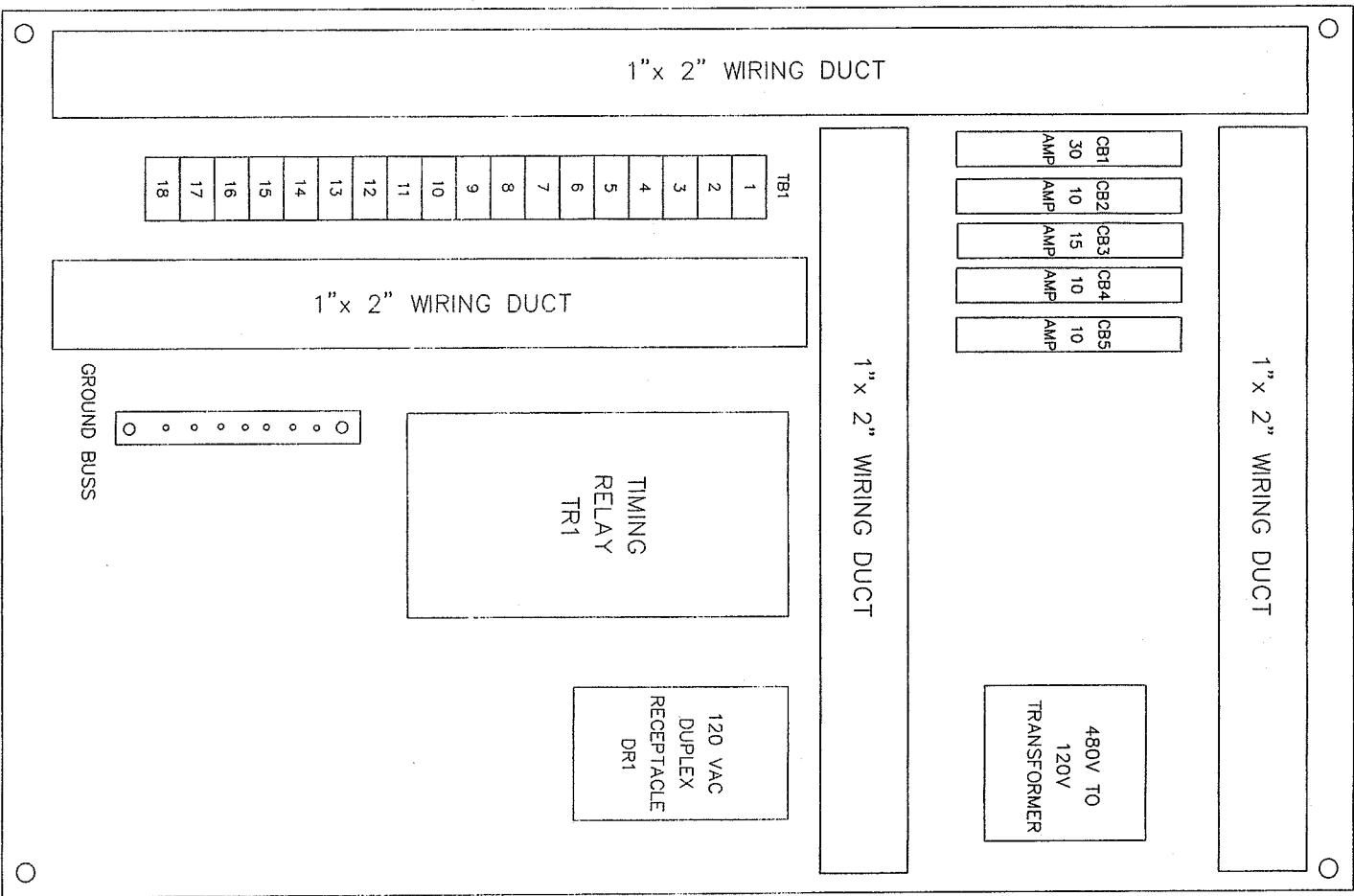
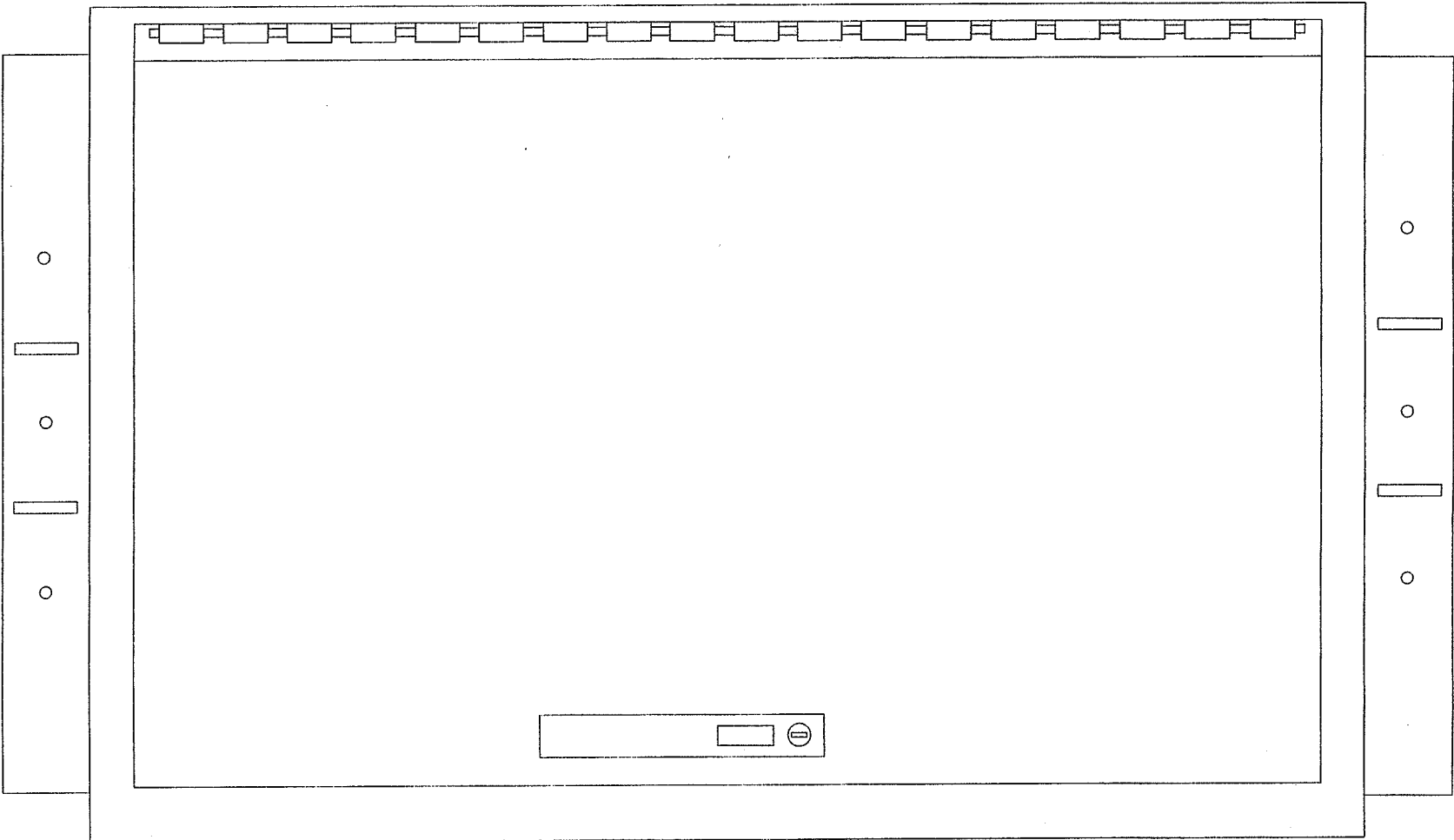
#	RUN NO.	WIRE NOTES	CONDUCTOR/ CABLE	REMARK
1		AERIAL 3/8" M.C.	1-3C-#8 1-4C-#12 1-3C-#2 1-2C #18 SHTW 3-#8 1-3C-#12 1-3C-#8 1-4C-#12 1-3C-#10 1-3C-#12 1-2C #18 SHTW 1-4C-#12 1-3C-#8 1-4C-#12 3-#12 1-2C #18 SHTW 1-3C-#12 1-4C-#12 1-3C-#8 1-4C-#12 3-#6 1-2C #18 SHTW 1-3C-#12 1-4C-#12 1-3C-#8 2/0 3-#4	FOR COMMUNICATION AND POWER FOR SIGN SIGNAL HEADS CONTROL FOR HORN AND STROBE LIGHT CONTROL FOR SIGN AND ALARM FOR COMMUNICATION AND POWER COMMUNICATION TO REMOTE DETECTOR POWER TO CABINET FROM TRANSFORMER POWER TO REMOTE DETECTOR FOR COMMUNICATION AND POWER FOR SIGN SIGNAL HEADS POWER TO CABINET FROM SIGN COMMUNICATION TO CABINET FOR SIGN CONTROL FOR HORN AND STROBE LIGHT POWER TO MASTER DETECTOR COMMUNICATION TO MASTER DETECTOR CONTROL FOR HORN AND STROBE LIGHT FOR COMMUNICATION AND POWER FOR SIGN SIGNAL HEADS CONTROL FOR SIGN AND ALARM FOR COMMUNICATION AND POWER POWER TO REMOTE DETECTOR COMMUNICATION TO REMOTE DETECTOR POWER TO MASTER DETECTOR CONTROL FOR HORN AND STROBE LIGHT POWER TO CABINET FROM TRANSFORMER POWER TO REMOTE DETECTOR COMMUNICATION TO REMOTE DETECTOR POWER TO CABINET FROM CPU TRANSFORMER POWER TO CABINET FROM CPU TRANSFORMER POWER TO CABINET FROM CPU TRANSFORMER
2		4"		
3		AERIAL 3/8" M.C.	1-2C #18 SHTW 1-4C-#12 1-4C-#12 1-3C-#8 1-4C-#12 1-3C-#10 1-3C-#12 1-2C #18 SHTW 1-4C-#12 1-3C-#8 1-4C-#12 3-#12 1-2C #18 SHTW 1-3C-#12 1-4C-#12 1-3C-#8 2/0 3-#4	FOR COMMUNICATION AND POWER FOR SIGN SIGNAL HEADS CONTROL FOR HORN AND STROBE LIGHT CONTROL FOR SIGN AND ALARM FOR COMMUNICATION AND POWER COMMUNICATION TO REMOTE DETECTOR POWER TO CABINET FROM TRANSFORMER POWER TO REMOTE DETECTOR FOR COMMUNICATION AND POWER FOR SIGN SIGNAL HEADS POWER TO CABINET FROM SIGN COMMUNICATION TO CABINET FOR SIGN CONTROL FOR HORN AND STROBE LIGHT POWER TO MASTER DETECTOR COMMUNICATION TO MASTER DETECTOR CONTROL FOR HORN AND STROBE LIGHT FOR COMMUNICATION AND POWER FOR SIGN SIGNAL HEADS CONTROL FOR SIGN AND ALARM FOR COMMUNICATION AND POWER POWER TO REMOTE DETECTOR COMMUNICATION TO REMOTE DETECTOR POWER TO MASTER DETECTOR CONTROL FOR HORN AND STROBE LIGHT POWER TO CABINET FROM TRANSFORMER POWER TO REMOTE DETECTOR COMMUNICATION TO REMOTE DETECTOR POWER TO CABINET FROM CPU TRANSFORMER POWER TO CABINET FROM CPU TRANSFORMER POWER TO CABINET FROM CPU TRANSFORMER
4		AERIAL 3/8" M.C.	1-4C-#12 1-4C-#12 1-3C-#8 1-4C-#12 1-3C-#10 1-3C-#12 1-2C #18 SHTW 1-4C-#12 1-3C-#8 1-4C-#12 3-#12 1-2C #18 SHTW 1-3C-#12 1-4C-#12 1-3C-#8 2/0 3-#4	FOR COMMUNICATION AND POWER FOR SIGN SIGNAL HEADS CONTROL FOR HORN AND STROBE LIGHT CONTROL FOR SIGN AND ALARM FOR COMMUNICATION AND POWER COMMUNICATION TO REMOTE DETECTOR POWER TO CABINET FROM TRANSFORMER POWER TO REMOTE DETECTOR FOR COMMUNICATION AND POWER FOR SIGN SIGNAL HEADS POWER TO CABINET FROM SIGN COMMUNICATION TO CABINET FOR SIGN CONTROL FOR HORN AND STROBE LIGHT POWER TO MASTER DETECTOR COMMUNICATION TO MASTER DETECTOR CONTROL FOR HORN AND STROBE LIGHT FOR COMMUNICATION AND POWER FOR SIGN SIGNAL HEADS CONTROL FOR SIGN AND ALARM FOR COMMUNICATION AND POWER POWER TO REMOTE DETECTOR COMMUNICATION TO REMOTE DETECTOR POWER TO MASTER DETECTOR CONTROL FOR HORN AND STROBE LIGHT POWER TO CABINET FROM TRANSFORMER POWER TO REMOTE DETECTOR COMMUNICATION TO REMOTE DETECTOR POWER TO CABINET FROM CPU TRANSFORMER POWER TO CABINET FROM CPU TRANSFORMER POWER TO CABINET FROM CPU TRANSFORMER
5		AERIAL 3/8" M.C.	1-4C-#12 1-4C-#12 1-3C-#8 1-4C-#12 1-3C-#10 1-3C-#12 1-2C #18 SHTW 1-4C-#12 1-3C-#8 1-4C-#12 3-#12 1-2C #18 SHTW 1-3C-#12 1-4C-#12 1-3C-#8 2/0 3-#4	FOR COMMUNICATION AND POWER FOR SIGN SIGNAL HEADS CONTROL FOR HORN AND STROBE LIGHT CONTROL FOR SIGN AND ALARM FOR COMMUNICATION AND POWER COMMUNICATION TO REMOTE DETECTOR POWER TO CABINET FROM TRANSFORMER POWER TO REMOTE DETECTOR FOR COMMUNICATION AND POWER FOR SIGN SIGNAL HEADS POWER TO CABINET FROM SIGN COMMUNICATION TO CABINET FOR SIGN CONTROL FOR HORN AND STROBE LIGHT POWER TO MASTER DETECTOR COMMUNICATION TO MASTER DETECTOR CONTROL FOR HORN AND STROBE LIGHT FOR COMMUNICATION AND POWER FOR SIGN SIGNAL HEADS CONTROL FOR SIGN AND ALARM FOR COMMUNICATION AND POWER POWER TO REMOTE DETECTOR COMMUNICATION TO REMOTE DETECTOR POWER TO MASTER DETECTOR CONTROL FOR HORN AND STROBE LIGHT POWER TO CABINET FROM TRANSFORMER POWER TO REMOTE DETECTOR COMMUNICATION TO REMOTE DETECTOR POWER TO CABINET FROM CPU TRANSFORMER POWER TO CABINET FROM CPU TRANSFORMER POWER TO CABINET FROM CPU TRANSFORMER
6		AERIAL 3/8" M.C.	1-4C-#12 1-4C-#12 1-3C-#8 1-4C-#12 1-3C-#10 1-3C-#12 1-2C #18 SHTW 1-4C-#12 1-3C-#8 1-4C-#12 3-#12 1-2C #18 SHTW 1-3C-#12 1-4C-#12 1-3C-#8 2/0 3-#4	FOR COMMUNICATION AND POWER FOR SIGN SIGNAL HEADS CONTROL FOR HORN AND STROBE LIGHT CONTROL FOR SIGN AND ALARM FOR COMMUNICATION AND POWER COMMUNICATION TO REMOTE DETECTOR POWER TO CABINET FROM TRANSFORMER POWER TO REMOTE DETECTOR FOR COMMUNICATION AND POWER FOR SIGN SIGNAL HEADS POWER TO CABINET FROM SIGN COMMUNICATION TO CABINET FOR SIGN CONTROL FOR HORN AND STROBE LIGHT POWER TO MASTER DETECTOR COMMUNICATION TO MASTER DETECTOR CONTROL FOR HORN AND STROBE LIGHT FOR COMMUNICATION AND POWER FOR SIGN SIGNAL HEADS CONTROL FOR SIGN AND ALARM FOR COMMUNICATION AND POWER POWER TO REMOTE DETECTOR COMMUNICATION TO REMOTE DETECTOR POWER TO MASTER DETECTOR CONTROL FOR HORN AND STROBE LIGHT POWER TO CABINET FROM TRANSFORMER POWER TO REMOTE DETECTOR COMMUNICATION TO REMOTE DETECTOR POWER TO CABINET FROM CPU TRANSFORMER POWER TO CABINET FROM CPU TRANSFORMER POWER TO CABINET FROM CPU TRANSFORMER
7		AERIAL 3/8" M.C.	1-4C-#12 1-4C-#12 1-3C-#8 1-4C-#12 1-3C-#10 1-3C-#12 1-2C #18 SHTW 1-4C-#12 1-3C-#8 1-4C-#12 3-#12 1-2C #18 SHTW 1-3C-#12 1-4C-#12 1-3C-#8 2/0 3-#4	FOR COMMUNICATION AND POWER FOR SIGN SIGNAL HEADS CONTROL FOR HORN AND STROBE LIGHT CONTROL FOR SIGN AND ALARM FOR COMMUNICATION AND POWER COMMUNICATION TO REMOTE DETECTOR POWER TO CABINET FROM TRANSFORMER POWER TO REMOTE DETECTOR FOR COMMUNICATION AND POWER FOR SIGN SIGNAL HEADS POWER TO CABINET FROM SIGN COMMUNICATION TO CABINET FOR SIGN CONTROL FOR HORN AND STROBE LIGHT POWER TO MASTER DETECTOR COMMUNICATION TO MASTER DETECTOR CONTROL FOR HORN AND STROBE LIGHT FOR COMMUNICATION AND POWER FOR SIGN SIGNAL HEADS CONTROL FOR SIGN AND ALARM FOR COMMUNICATION AND POWER POWER TO REMOTE DETECTOR COMMUNICATION TO REMOTE DETECTOR POWER TO MASTER DETECTOR CONTROL FOR HORN AND STROBE LIGHT POWER TO CABINET FROM TRANSFORMER POWER TO REMOTE DETECTOR COMMUNICATION TO REMOTE DETECTOR POWER TO CABINET FROM CPU TRANSFORMER POWER TO CABINET FROM CPU TRANSFORMER POWER TO CABINET FROM CPU TRANSFORMER
8		AERIAL 3/8" M.C.	1-4C-#12 1-4C-#12 1-3C-#8 1-4C-#12 1-3C-#10 1-3C-#12 1-2C #18 SHTW 1-4C-#12 1-3C-#8 1-4C-#12 3-#12 1-2C #18 SHTW 1-3C-#12 1-4C-#12 1-3C-#8 2/0 3-#4	FOR COMMUNICATION AND POWER FOR SIGN SIGNAL HEADS CONTROL FOR HORN AND STROBE LIGHT CONTROL FOR SIGN AND ALARM FOR COMMUNICATION AND POWER COMMUNICATION TO REMOTE DETECTOR POWER TO CABINET FROM TRANSFORMER POWER TO REMOTE DETECTOR FOR COMMUNICATION AND POWER FOR SIGN SIGNAL HEADS POWER TO CABINET FROM SIGN COMMUNICATION TO CABINET FOR SIGN CONTROL FOR HORN AND STROBE LIGHT POWER TO MASTER DETECTOR COMMUNICATION TO MASTER DETECTOR CONTROL FOR HORN AND STROBE LIGHT FOR COMMUNICATION AND POWER FOR SIGN SIGNAL HEADS CONTROL FOR SIGN AND ALARM FOR COMMUNICATION AND POWER POWER TO REMOTE DETECTOR COMMUNICATION TO REMOTE DETECTOR POWER TO MASTER DETECTOR CONTROL FOR HORN AND STROBE LIGHT POWER TO CABINET FROM TRANSFORMER POWER TO REMOTE DETECTOR COMMUNICATION TO REMOTE DETECTOR POWER TO CABINET FROM CPU TRANSFORMER POWER TO CABINET FROM CPU TRANSFORMER POWER TO CABINET FROM CPU TRANSFORMER
9		AERIAL 3/8" M.C.	1-4C-#12 1-4C-#12 1-3C-#8 1-4C-#12 1-3C-#10 1-3C-#12 1-2C #18 SHTW 1-4C-#12 1-3C-#8 1-4C-#12 3-#12 1-2C #18 SHTW 1-3C-#12 1-4C-#12 1-3C-#8 2/0 3-#4	FOR COMMUNICATION AND POWER FOR SIGN SIGNAL HEADS CONTROL FOR HORN AND STROBE LIGHT CONTROL FOR SIGN AND ALARM FOR COMMUNICATION AND POWER COMMUNICATION TO REMOTE DETECTOR POWER TO CABINET FROM TRANSFORMER POWER TO REMOTE DETECTOR FOR COMMUNICATION AND POWER FOR SIGN SIGNAL HEADS POWER TO CABINET FROM SIGN COMMUNICATION TO CABINET FOR SIGN CONTROL FOR HORN AND STROBE LIGHT POWER TO MASTER DETECTOR COMMUNICATION TO MASTER DETECTOR CONTROL FOR HORN AND STROBE LIGHT FOR COMMUNICATION AND POWER FOR SIGN SIGNAL HEADS CONTROL FOR SIGN AND ALARM FOR COMMUNICATION AND POWER POWER TO REMOTE DETECTOR COMMUNICATION TO REMOTE DETECTOR POWER TO MASTER DETECTOR CONTROL FOR HORN AND STROBE LIGHT POWER TO CABINET FROM TRANSFORMER POWER TO REMOTE DETECTOR COMMUNICATION TO REMOTE DETECTOR POWER TO CABINET FROM CPU TRANSFORMER POWER TO CABINET FROM CPU TRANSFORMER POWER TO CABINET FROM CPU TRANSFORMER
10		AERIAL 3/8" M.C.	1-4C-#12 1-4C-#12 1-3C-#8 1-4C-#12 1-3C-#10 1-3C-#12 1-2C #18 SHTW 1-4C-#12 1-3C-#8 1-4C-#12 3-#12 1-2C #18 SHTW 1-3C-#12 1-4C-#12 1-3C-#8 2/0 3-#4	FOR COMMUNICATION AND POWER FOR SIGN SIGNAL HEADS CONTROL FOR HORN AND STROBE LIGHT CONTROL FOR SIGN AND ALARM FOR COMMUNICATION AND POWER COMMUNICATION TO REMOTE DETECTOR POWER TO CABINET FROM TRANSFORMER POWER TO REMOTE DETECTOR FOR COMMUNICATION AND POWER FOR SIGN SIGNAL HEADS POWER TO CABINET FROM SIGN COMMUNICATION TO CABINET FOR SIGN CONTROL FOR HORN AND STROBE LIGHT POWER TO MASTER DETECTOR COMMUNICATION TO MASTER DETECTOR CONTROL FOR HORN AND STROBE LIGHT FOR COMMUNICATION AND POWER FOR SIGN SIGNAL HEADS CONTROL FOR SIGN AND ALARM FOR COMMUNICATION AND POWER POWER TO REMOTE DETECTOR COMMUNICATION TO REMOTE DETECTOR POWER TO MASTER DETECTOR CONTROL FOR HORN AND STROBE LIGHT POWER TO CABINET FROM TRANSFORMER POWER TO REMOTE DETECTOR COMMUNICATION TO REMOTE DETECTOR POWER TO CABINET FROM CPU TRANSFORMER POWER TO CABINET FROM CPU TRANSFORMER POWER TO CABINET FROM CPU TRANSFORMER

NOTE: ALL CONDUCTORS SHALL BY TYPE THHN.



NOTES:

1. ENCLOSURE (ELECTRICAL CONTROL CABINET) SHALL BE MOUNTED USING UNISTRUTS.
2. SUB-PANEL SHALL BE WHITE ENAMEL PAINTED STEEL.
3. ALL CONDUIT TERMINATIONS SHALL BE WATERPROOF AND HAVE GROUNDING BUSHINGS.
4. ALL ELECTRICAL EQUIPMENT AND WIRING PRACTICES SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE NATIONAL ELECTRIC CODE.
5. ENCLOSURE DOOR MECHANISM SHALL BE OF THE LOCKING TYPE.
6. ENCLOSURE MOUNTING HEIGHT SHALL BE 5 FEET FROM THE GROUND AS MEASURED FROM THE BOTTOM OF THE ENCLOSURE. SEE SHEET 4, 5, AND 6 FOR ENCLOSURE MOUNTING DETAILS.



SUB-PANEL ASSEMBLY
FOR MASTER DETECTOR SCHEMATIC SEE SHEET 8.
FOR BRIDGE WARNING SYSTEM SCHEMATIC SEE SHEET 9.

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STPF-425310101

ADDENDUM No.2 3/26/04



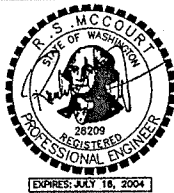
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DESIGN & ENGINEERING DIVISION
DESIGN SECTION

OVERHEIGHT VEHICLE DETECTOR/WARNING SYSTEM
CABINET DETAIL

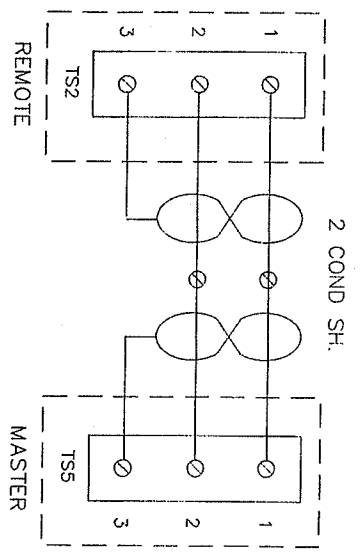
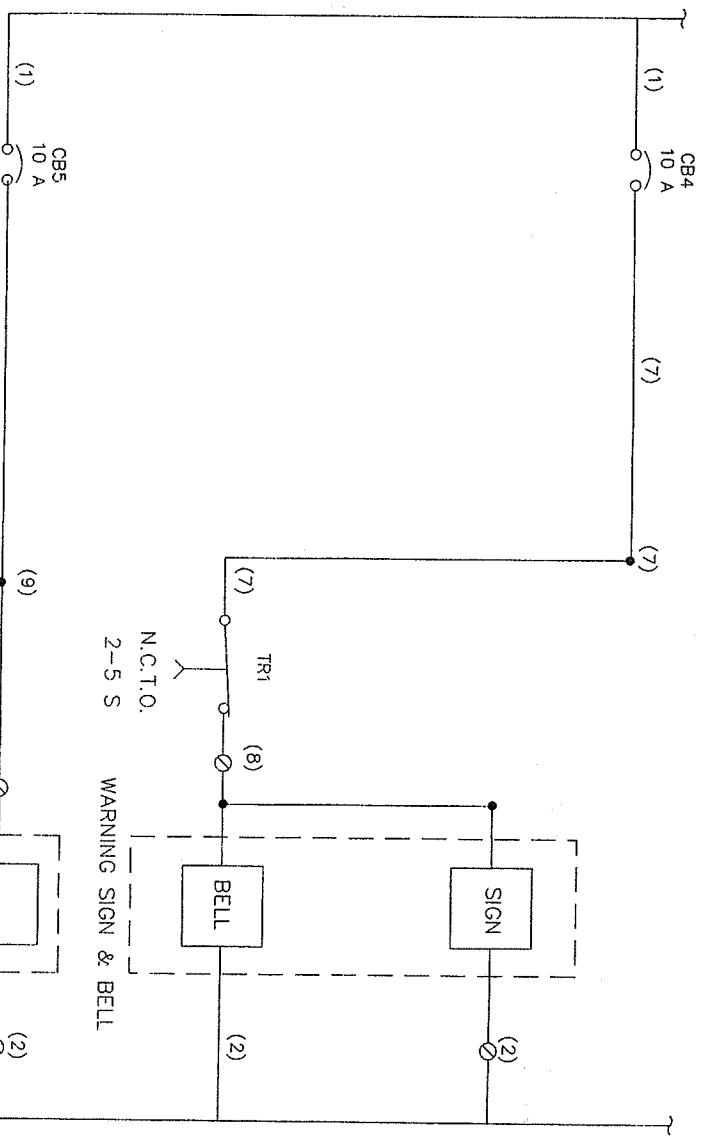
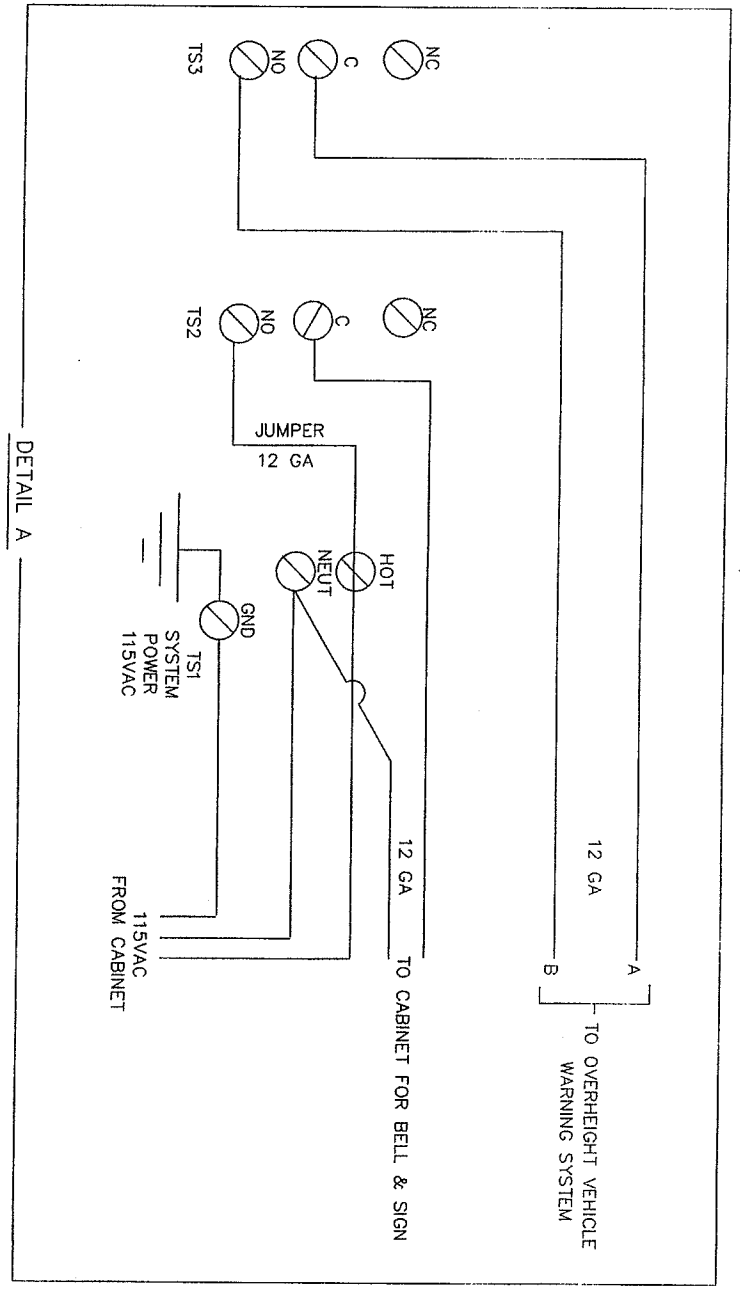
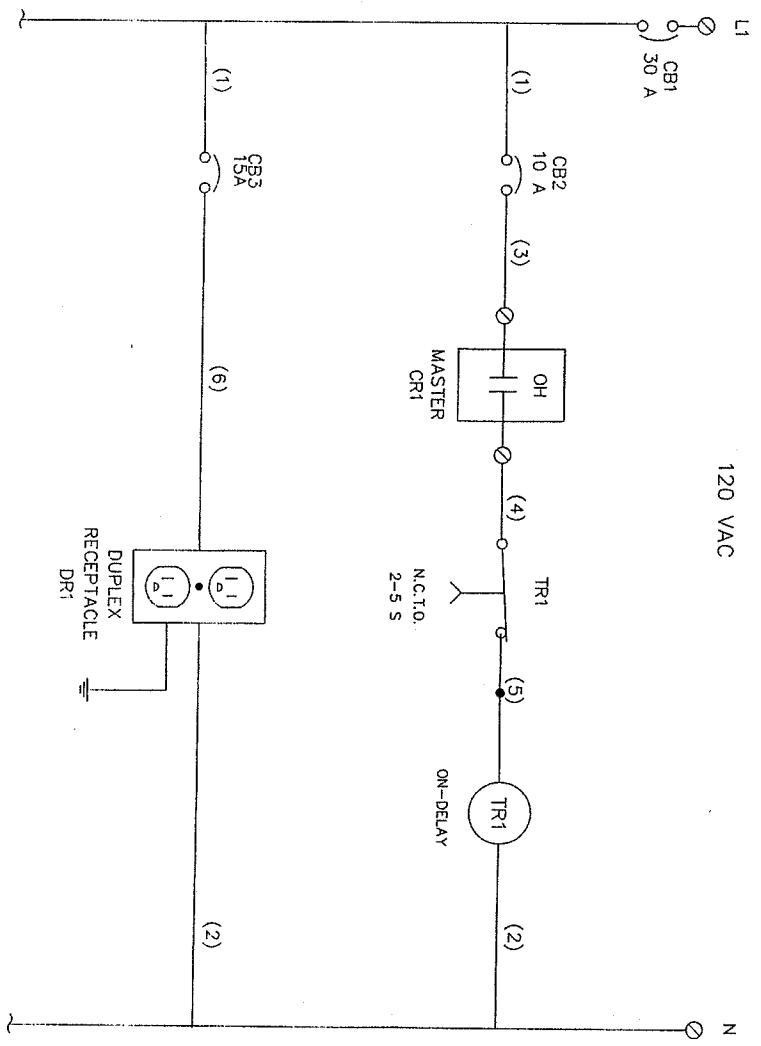
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SHEET 7 OF 11



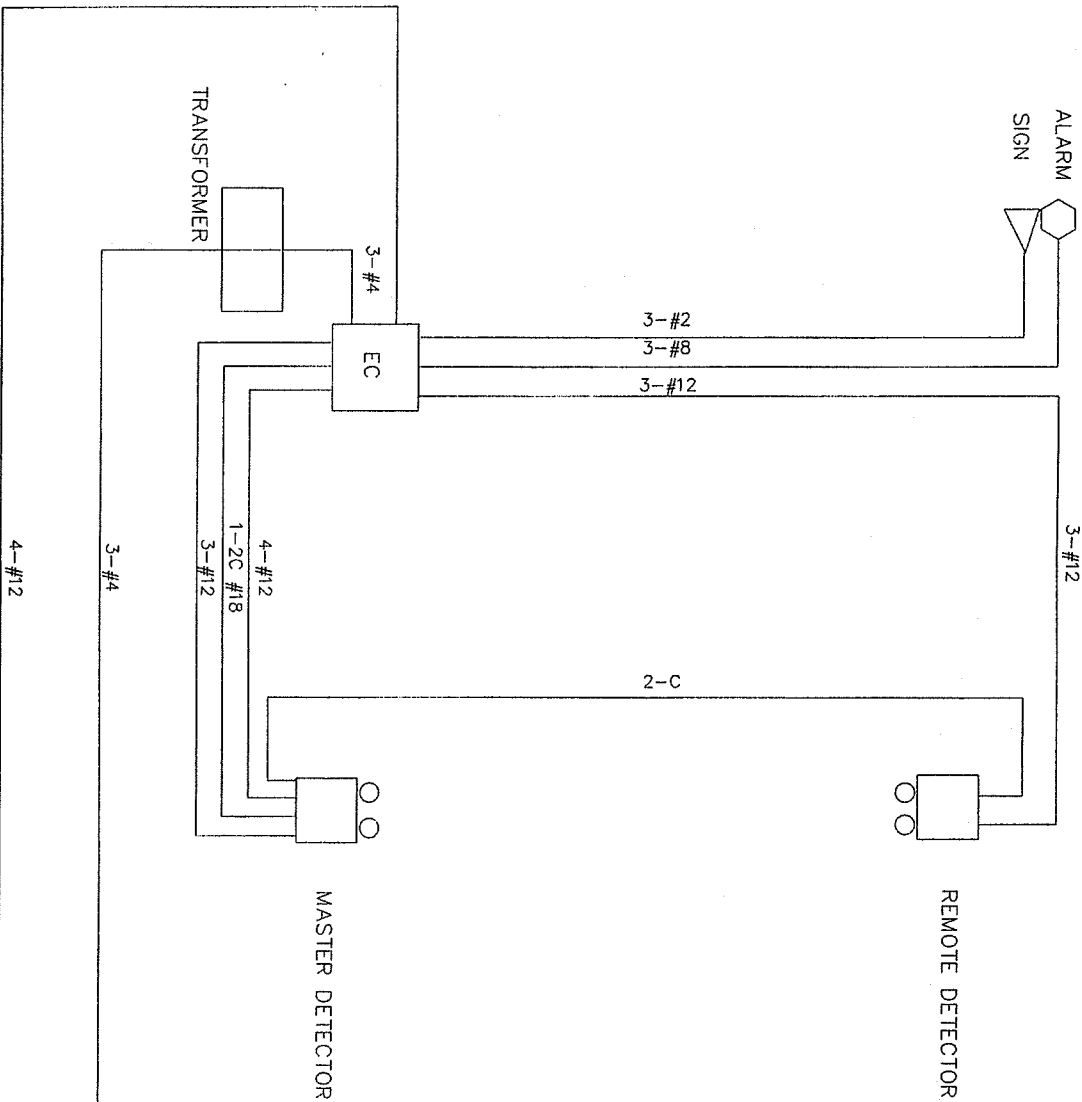
CABINET SCHEMATIC DIAGRAM

MASTER DETECTOR SYSTEM

KEY	
CB	CIRCUIT BREAKER
TR	TIME RELAY
CR	CONTACT RELAY
N.C.T.O.	NORMAL CLOSED TO OPEN
S.	SECOND
A	AMP
TB	TERMINAL BLOCK
TS	TERMINAL STRIP
DR	DUPLEX RECEPTACLE
OH	OVERHEIGHT
SH	SHIELDED

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SEE SHEET 11

VEHICLE DETECTOR SYSTEM

SYSTEM SCHEMATIC DIAGRAM

ADDENDUM No.2 3/26/04

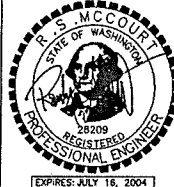


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OVERHIEGHT VEHICLE DETECTOR SYSTEM
SYSTEM SCHEMATIC DIAGRAM

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SHEET 10	OF 11

OVERHEAD TRANSFORMER
(POWER SOURCE FOR BRIDGE
WARNING SYSTEM)

BRIDGE WARNING SYSTEM
ELECTRICAL CONTROL CABINET

ON POLE
#16451

3-#6

EC

4-#12

AMBER STROBE LIGHT

ALARM/HORN

OVERHEAD TRANSFORMER
(POWER SOURCE FOR BRIDGE
WARNING SYSTEM)

ON POLE
#40752

3-#6

2-C

REMOTE
DETECTOR

SEE SHEET 10

4-#12

EC

TO ELECTRICAL
CONTROL CABINET
MASTER DETECTOR
ON SHEET 10

AMBER STROBE LIGHT

ALARM/HORN

2-C

MASTER
DETECTOR

3-#12

2-C

3-#12

ON POLE
#9314

3-#6

BRIDGE WARNING SYSTEM
ELECTRICAL CONTROL
CABINET

2-C

3-#12

REMOTE
DETECTOR

EC

3-#6

4-#12

3-#6

EC

MASTER
DETECTOR

2-C

3-#12

AT 12923
NE 27TH AVE

OVERHEAD TRANSFORMER
(POWER SOURCE FOR MASTER
DETECTOR SYSTEM)

ALARM
SIGN

3-#12

2-C

REMOTE
DETECTOR

3-#8

3-#12

4-#12

2-C

3-#12

MASTER
DETECTOR

BRIDGE WARNING SYSTEM

VEHICLE DETECTOR SYSTEM

SYSTEM SCHEMATIC DIAGRAM

Fed. Aid No.
STPF-4253(0101)

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SHEET 11 OF 11